

ARITECH

→ **CS175-275-575-875**

→ **LCD/LED Installation Guide**

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an **interlogix** company.

98/482/EC declaration

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1 INTRODUCING THE CSx75 SYSTEM

The CSx75 range represents a new approach to security systems design. It is flexible, durable and user-friendly.

The design allows a fully loaded system to be housed in one single metal or plastic enclosure, establishing a logical solution and design response to modular systems.

Four different panel types are available: the CS175, the CS275, the CS575 and the CS875. In this manual, they are known collectively as the CSx75.

The CS875 version includes:

- Access for up to 99 users.
- Up to 168 zones. Up to 128 of these can be wireless zones.
- Four on-board outputs: two relay outputs, two open collector outputs.
- Separate on-board external and internal sounder output, with built-in siren driver for the internal sounder.
- Eight partitions.
- Integrated fire, access, verification and input/output modules.
- Franklin 4+2, SIA, 200 baud FSK and Contact ID report formats.
- Hardware expansion with up to 32 modules.

The CS575 version includes:

- Access for up to 99 users.
- Up to 48 zones, either wireless or hardwired.
- Four on-board outputs: two relay outputs, two open collector outputs.
- Separate on-board external and internal sounder output, with built-in siren driver for the internal sounder.
- Four partitions.
- Integrated fire, access, verification and input/output modules.
- Franklin 4+2, SIA, 200 baud FSK and Contact ID report formats.
- Hardware expansion with up to 32 modules.

The CS275 version includes:

- Access for up to 40 users.
- Up to a maximum of 16 zones; expansion only by wireless.
- Four on-board outputs: four open collector outputs.
- Separate on-board external and internal sounder output, with built-in siren driver for the internal sounder.

- Two partitions.
- Integrated fire, access, verification and input/output modules.
- Franklin 4+2, SIA, 200 baud FSK and Contact ID report formats.
- Hardware expansion with up to three modules.

The CS175 version includes:

- Access for up to eight users.
- Up to a maximum of eight zones; expansion only by wireless.
- Two on-board outputs: two open collector outputs.
- External sounder output.
- Integrated fire, access, verification and input/output module.
- Franklin 4+2, SIA, 200 baud FSK and Contact ID report formats.
- Hardware expansion with one module.

Optional accessories include:

- CS534 audio board.
- CS535 voice module.
- CS216 input expanders.
- CS507 output expanders.
- RX8i4, RX16i4 wireless receiver for wireless sensor on 433 MHz.
- RX8w8, RX16w8 wireless receiver for wireless sensor on 868 MHz.

2 DEFAULT CODES

Default installer code	1278 when using a four-digit code 127800 when using a six-digit code	Location 53 sets the number of digits. Location 54 changes this code.
Default master user code	1122 when using a four-digit code 112256 when using a six-digit code	Location 53 sets the number of digits Users should change the user code.
Download access code	12780000	Location 30 changes this code.

3 DEFAULT COUNTRY CODES

Country	Country code	User code	Installer code	Download Access Code
Baltic states	03	1122	1278	12780000
France	02	1122(56)	1278(00)	84800000
Belgium	11	1122(56)	1278(00)	12780000
Czech Republic	20	1122	1278	12780000
Denmark	07	1122	1278	12780000
Hungary	22	1122	1278	12780000
Holland	01	1122(56)	1278(00)	12780000
Ireland	12	1122	1278	12780000
Italy	10	7777(77)	8522(22)	84800000
Norway	05	1122	1278	12780000
Poland	18	1122(56)	1278	84800000
Portugal	21	1122(56)	1278(00)	84800000
Slovak Republic	24	1122	1278	12780000
Spain	09	1122(56)	1278(00)	84800000
Sweden	06	1122	1278	12780000
UK	03	1122	1278	12780000

The brackets contain additional digits for six-digit codes.



4 INSTALLATION GUIDELINES

This installation manual details the installation and programming of the CSx75 using an LCD keypad or LED keypad. You can also program the system from a PC using the up/download procedure and Windows-based software.

4.1 Installing the system

Essential	Optional
<ul style="list-style-type: none">Control unit and keypadFour or six-way security wireBattery for control unit (7.2Ah recommended)Screws, wall plugs and cable clipsSensorsSoundersScrewdrivers, wire cutters and wire strippers	<ul style="list-style-type: none">Additional keypadsAdditional expansion modulesVoice moduleRS232 adapter (depending on model)KeystwitchPC with Windows softwareMultimeterKeypad on a long leadInput and output expandersHome automation module



The CS175 must have at least one keypad (LED or LCD) installed. On the CS275, CS575 and CS875 you can disconnect the keypad after programming or program remotely by means of the up/download package.

4.2 Wiring the system

The CSx75 control panel has been designed, assembled and tested to meet the requirements of current relevant standards related to safety, emission and immunity with respect to environmental electrical and electromagnetic interference. Only a qualified electrician or other suitable trained and qualified person should attempt to wire this system to the mains or to the public telephone network.



Always disconnect the mains power before opening the control panel cabinet. Disconnect the AC mains plug from the AC mains wall socket or disconnect the mains by means of the dedicated circuit breaker provided.

When installing the CSx75, you should follow local standards and the following guidelines.

1. Ensure that there is a good earth for the alarm system. A good earth is essential for effective resistance to electrical interference. Do not forget to provide a network earth for the telephone dialler.
2. Maintain a good separation between low voltage and mains supply cables. Use separate points of cable entry to the control panel cabinet.
3. Avoid loops of wire inside the control panel and route cables so they do not lie on top or underneath the printed circuit board. The use of cable ties is recommended and improves neatness within the box.
4. Mains switching relays must not be fitted inside the control panel cabinet. The switching of these relays may cause electrical interference. Any circuit connected either directly to the on-board relay's contact or to the external relay's contact

through the on-board electronic output, must be of SELV (Safety extra-low voltage) operating circuit.

- Use a relay with good insulation between the contacts and the coil.
- Place a suppression diode, for example, a 1N4001, across the relay coil.
- Relays connected to open collector outputs of the alarm system should be rated at 12 volts DC with a coil impedance greater than 400 Ohms.

5. The remote bus cable is used for communication between the control panel and the keypads/expanders. The greatest care should be taken when installing this cable. Never split it into separate cables. Do not use cables with wires that are used for telephone connections or for switching, for example, flashing LEDs, sirens or relays.
6. Avoid cable ducts and cableways that contain mains power cables. This is particularly important when such ducts contain cables supplying electric motors, fluorescent lights or three-phase power. If this is not possible, shielded cable should be used and the cable should be earthed at the control panel end only.
7. If the upper and/or lower cabinet entry cable holes are used to route wiring into the control panel, always use a proper pipe fitting system by means of appropriate conduit and junction box. Use only materials of suitable flammability class (HB or better).
8. For mains power connection, use the mains connector terminal either through a permanent wiring or a flexible mains cable to an earthed mains outlet. Always use cable ties to fix mains cable at the dedicated fixing point provided near the mains terminal connector.
 - For permanent fixed wiring, insert an easily accessible, dedicated bipolar circuit breaker in the power distribution network.
 - Do not solder the end of a stranded conductor at places where the conductor is subject to a contact pressure, unless the method of clamping reduces the risk of a bad contact due to cold flow of the solder.

4.3 Basic installation procedure

You should first identify a suitable place for the control unit. This must be convenient to a mains supply and a telephone connection.

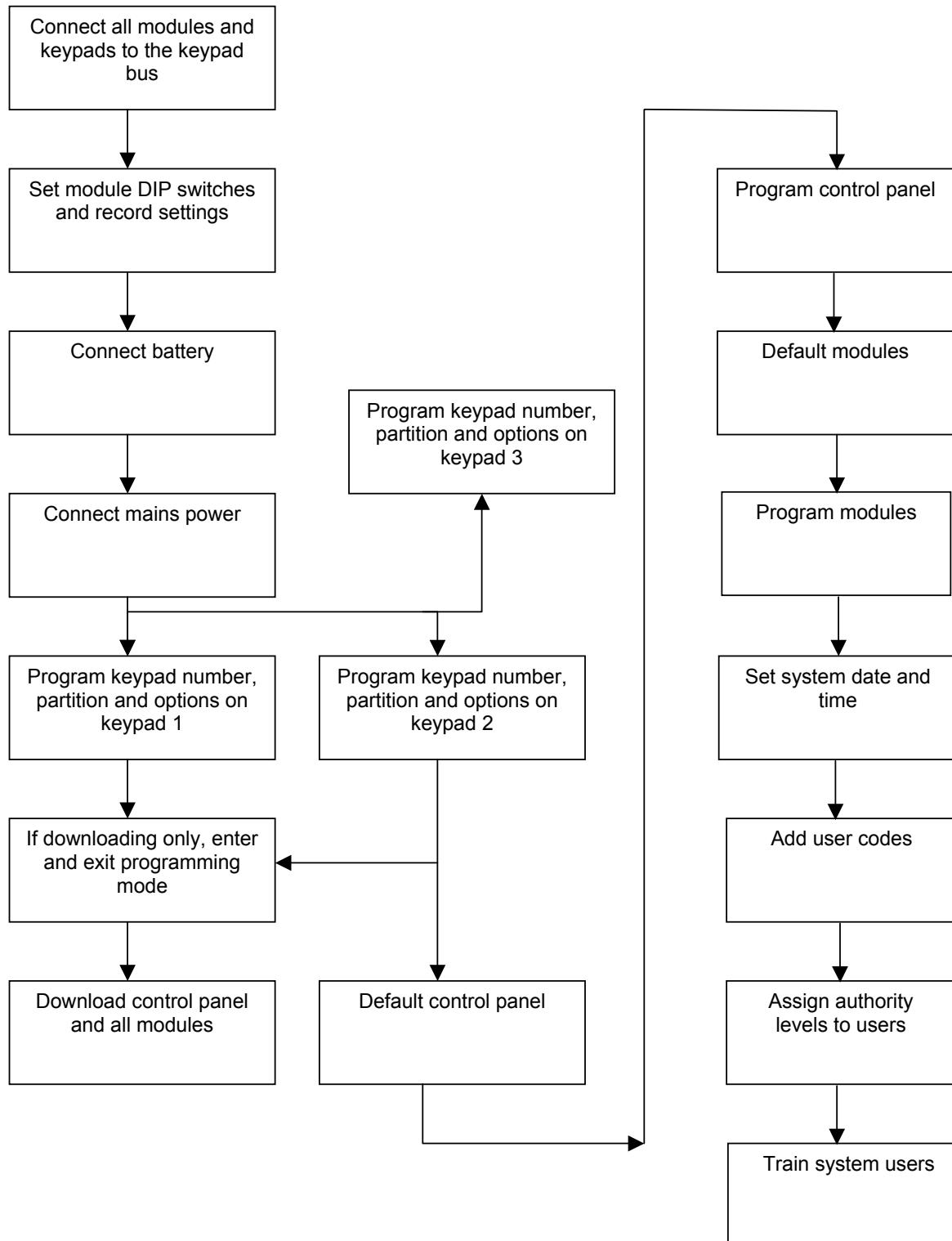
You must then:

1. Mount the sensors, keypads, control unit, smoke detectors and sounders.
2. Connect all modules and keypads to the keypad bus, making sure to set the DIP switches on the modules and record the module addresses. These are needed later.
3. Connect the battery and the mains power. The control panel will not start if only the battery is connected.
4. Program all keypads with their keypad number and partition number using *** 94**. See *Setting keypad options* on page 40 for more information.
5. Set the options on each keypad.
6. Once all keypads have been programmed, you can either enter and exit programming mode to initialise the modules and keypads, or continue by

defaulting and programming the control panel and the modules, adding users and setting authority levels.

7. Set the country code. After changing the country code, the defaults for the selected country are restored in the panel.

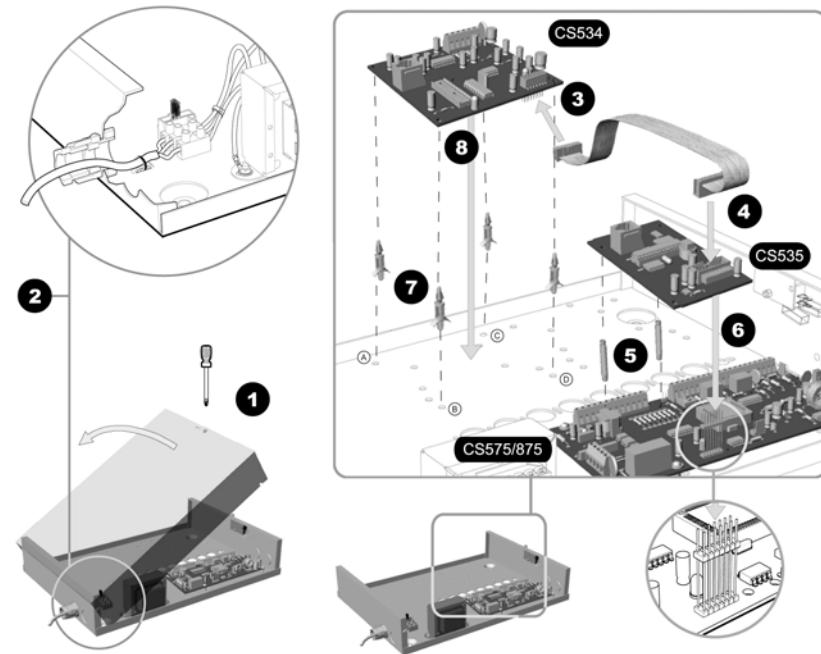
4.4 Installation schematic



INSTALLING THE CONTROL UNIT

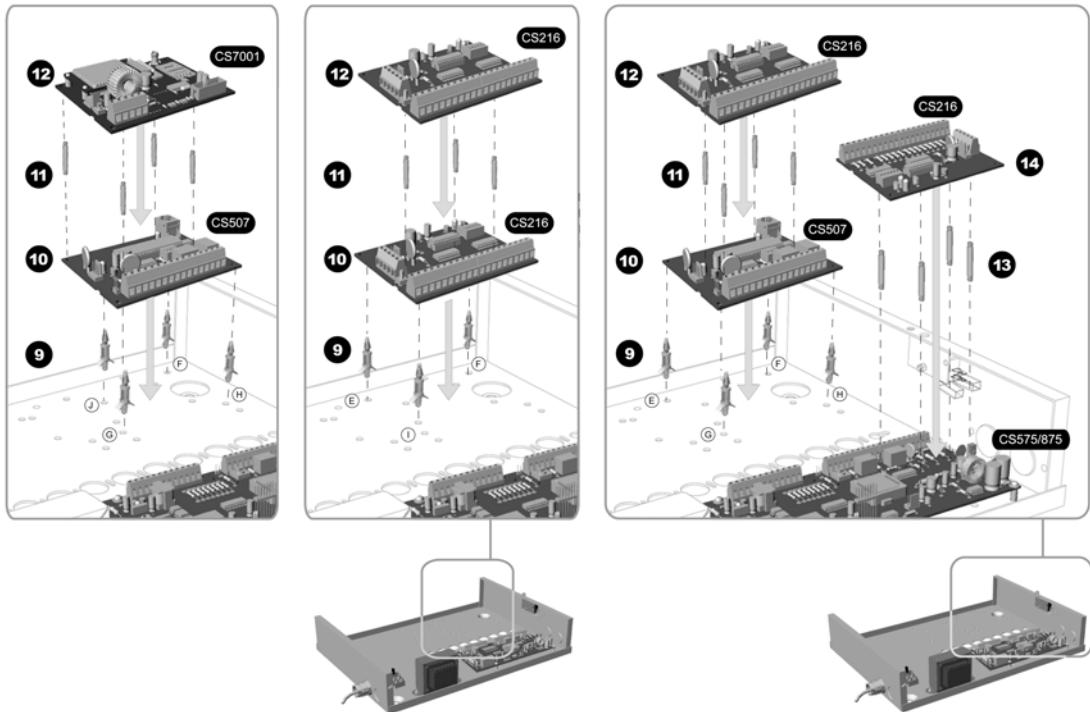
4.4.1 CS575M/CS875M (large metal housing)

This large metal housing can be used with the CS575 and CS875.



Steps

1. Open the box.
2. Wire the panel.
3. Attach the ribbon cable to the CS534 listen-in module.
4. Connect the CS534 listen-in module and CS535 voice module with the ribbon cable.
5. Add the pillars for the CS535 voice module to the board.
6. Attach the CS535 voice module to the board via the jumpers and pillars.
7. Attach the pillars for the CS534 listen-in module to the box.
8. Insert the CS534 listen-in module in the box.



9. Add the pillars for the CS507 output module or CS216 input expander or CS7001 to the box.

10. Mount the CS507 output module or CS216 input expander or CS7001.

11. Mount the pillars for another module on the board mounted in the box in step 10.

12. Mount another module on the pillars placed in step 11.

13. Mount the pillars for a CS216 input expander on the CS575/875 board.

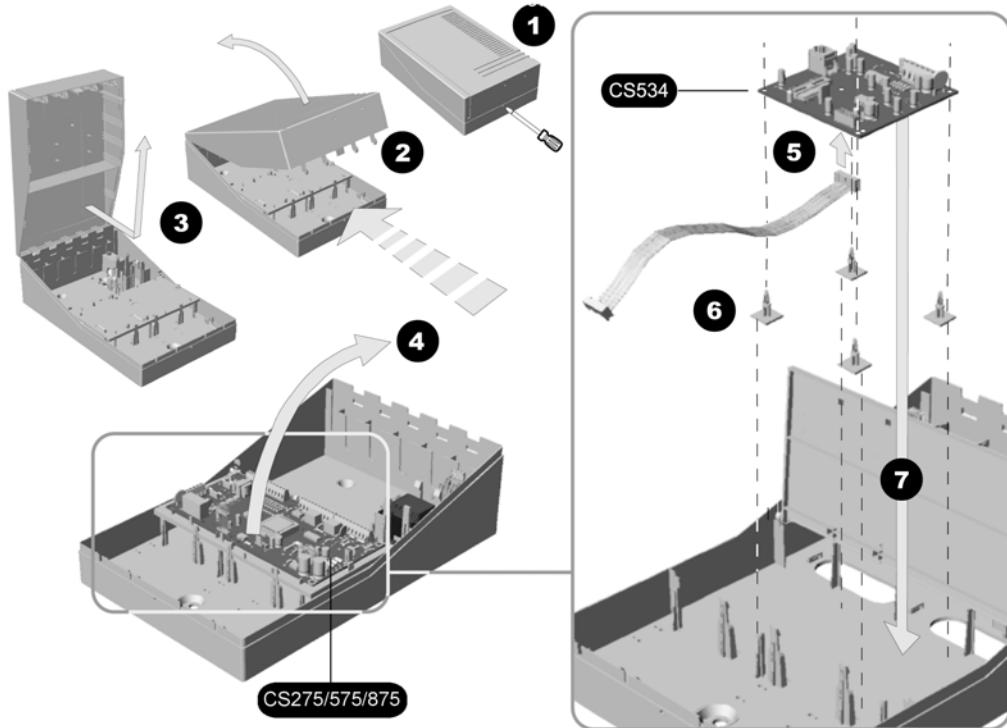
14. Mount the CS216 input expander on the CS575/875 board.

15. Wire the keypad bus for all modules. Check the installation instructions for each module modules for wiring information.

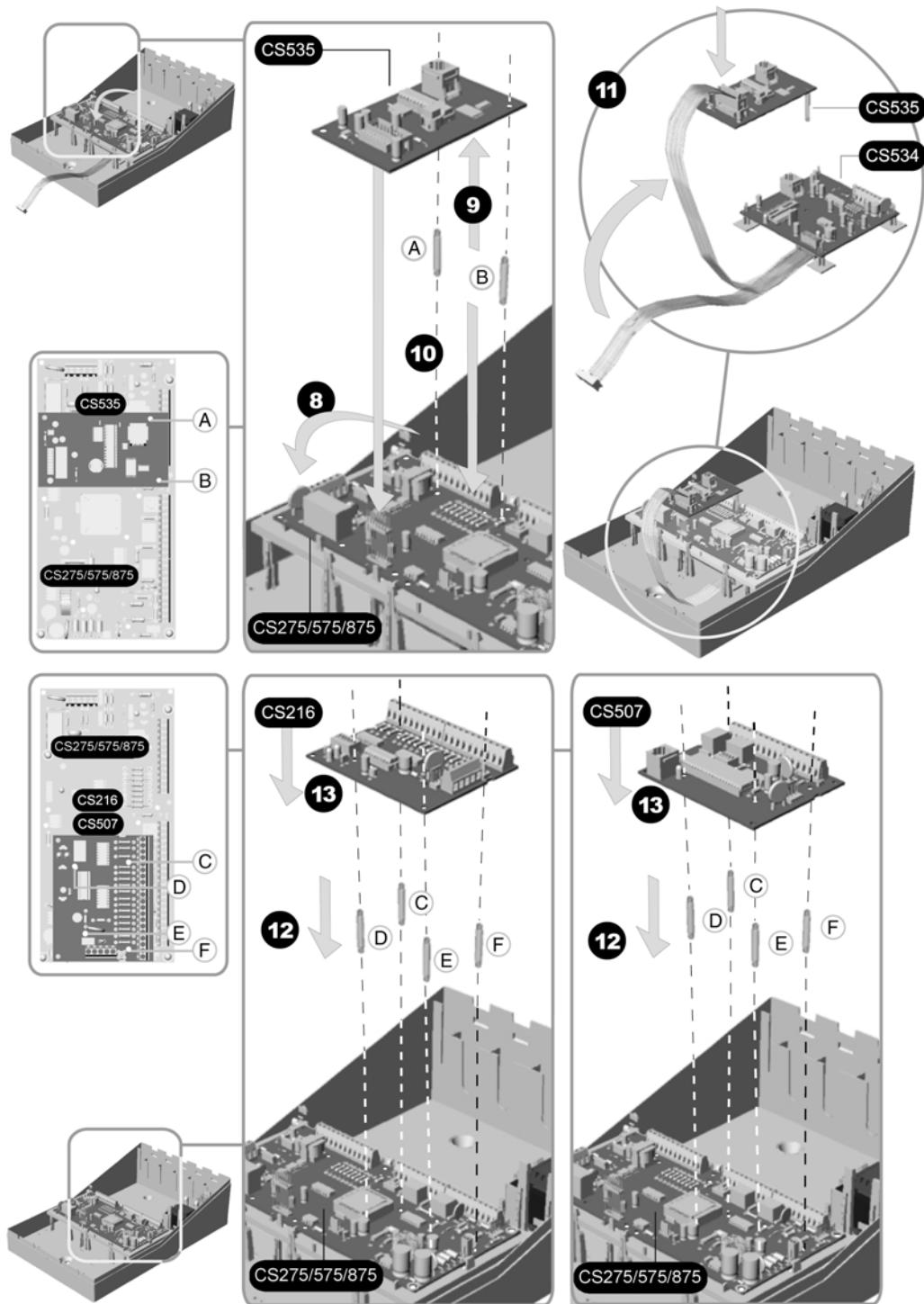
16. Connect the battery and power up the panel.

4.4.2 CS275/CS575/CS875 (polycarbonate housing)

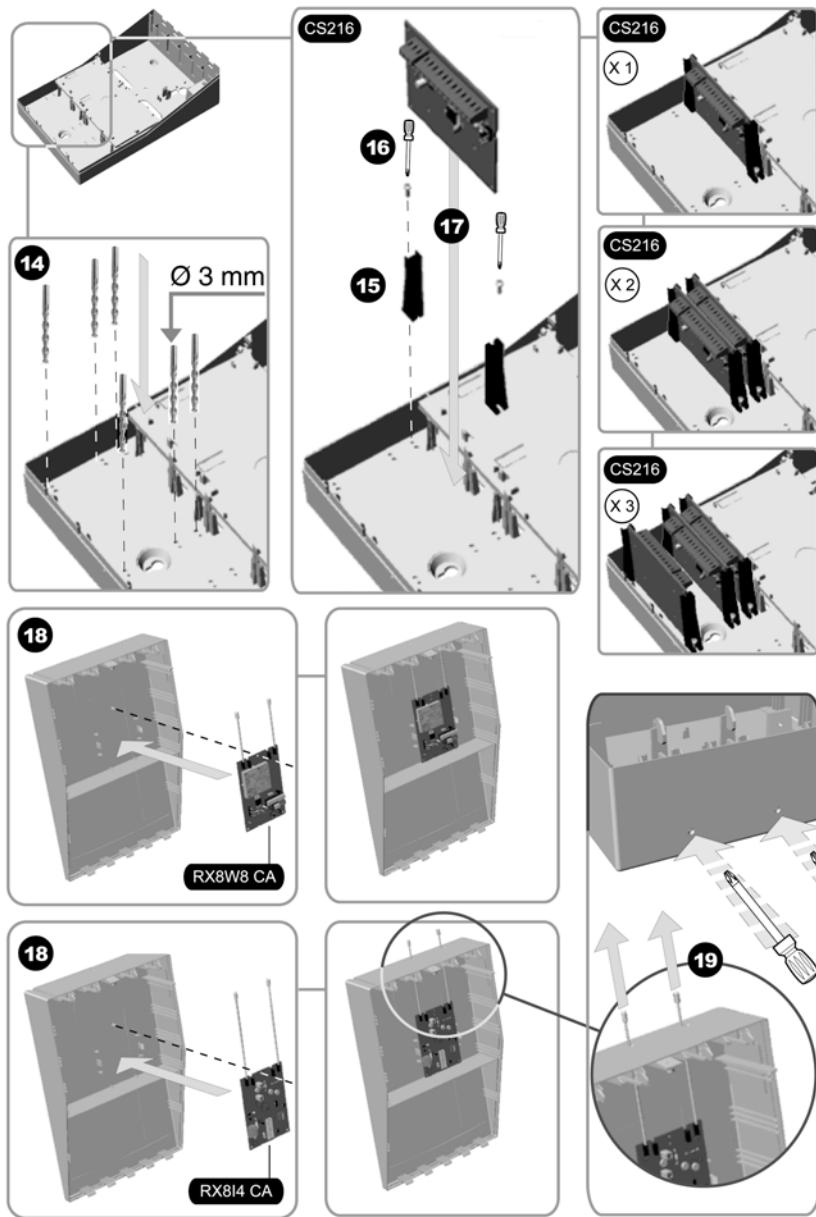
This polycarbonate housing can be used with the CS275, CS575 and CS875.



1. Unscrew the holding screw in the polycarbonate housing.
2. Open the box.
3. Lift off the lid of the box.
4. Flip up the PCB mounting tray.
5. Attach the ribbon cable to the CS534 listen-in module.
6. Remove the sticky pads and insert the pillars for the CS534 listen-in module in the box.
7. Connect the CS534 listen-in module to the box.



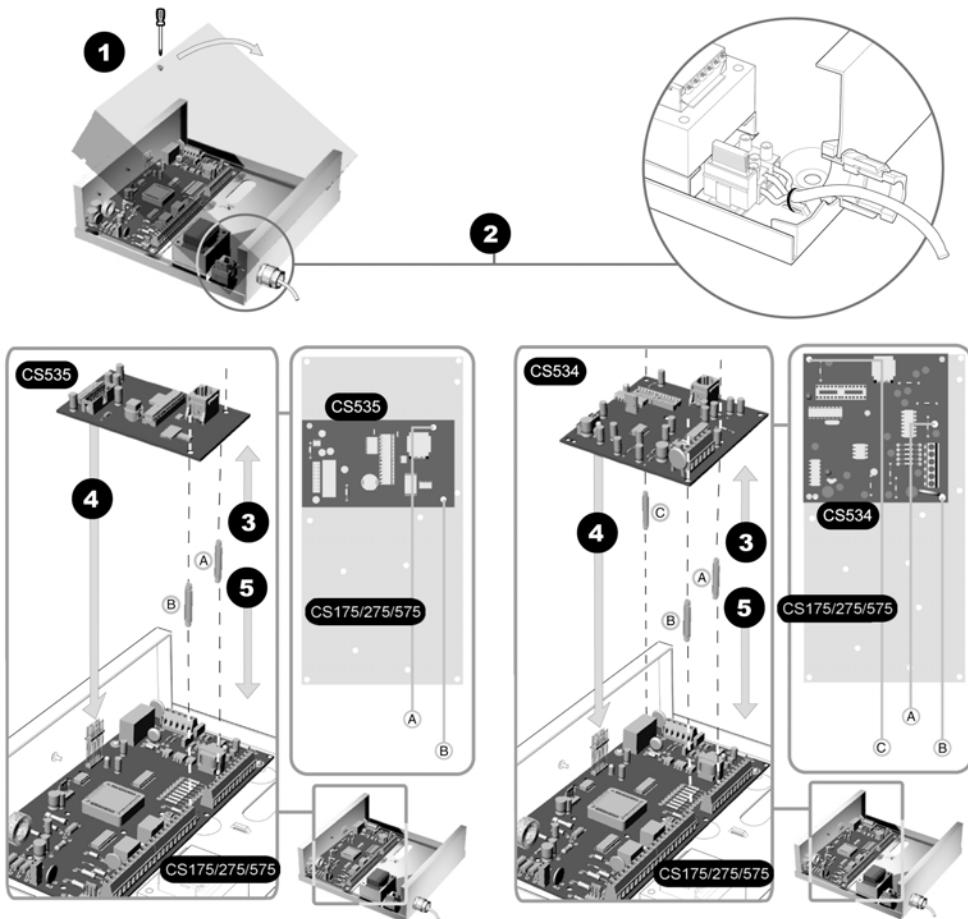
8. Flip down the PCB mounting tray.
9. Attach the pillars for the CS535 voice module to the board.
10. Attach the CS535 voice module to the board via the jumpers and pillars.
11. Connect the CS534 listen-in module and CS535 voice module with the ribbon cable.
12. Attach the pillars for the CS216 input expander or CS507 output module to the board.
13. Mount the CS216 input expander or CS507 output module on the board.



14. Drill 0.3 mm holes for the card guides in the box.
15. Place the card guide on the box.
16. Screw in the card guides.
17. Use card guides to mount up to 3 further pre-wired modules. See the modules for wiring instructions.
18. Mount the RF receiver in the lid of the box. This facility is not available in every country.
19. If you are installing an RX8I4, RX16I4 or RX48I4 CA series receiver you must insert the antennae through the lid.
20. Wire the keypad bus for any other modules that are not in the card guides.
21. Connect the battery and power up the panel.

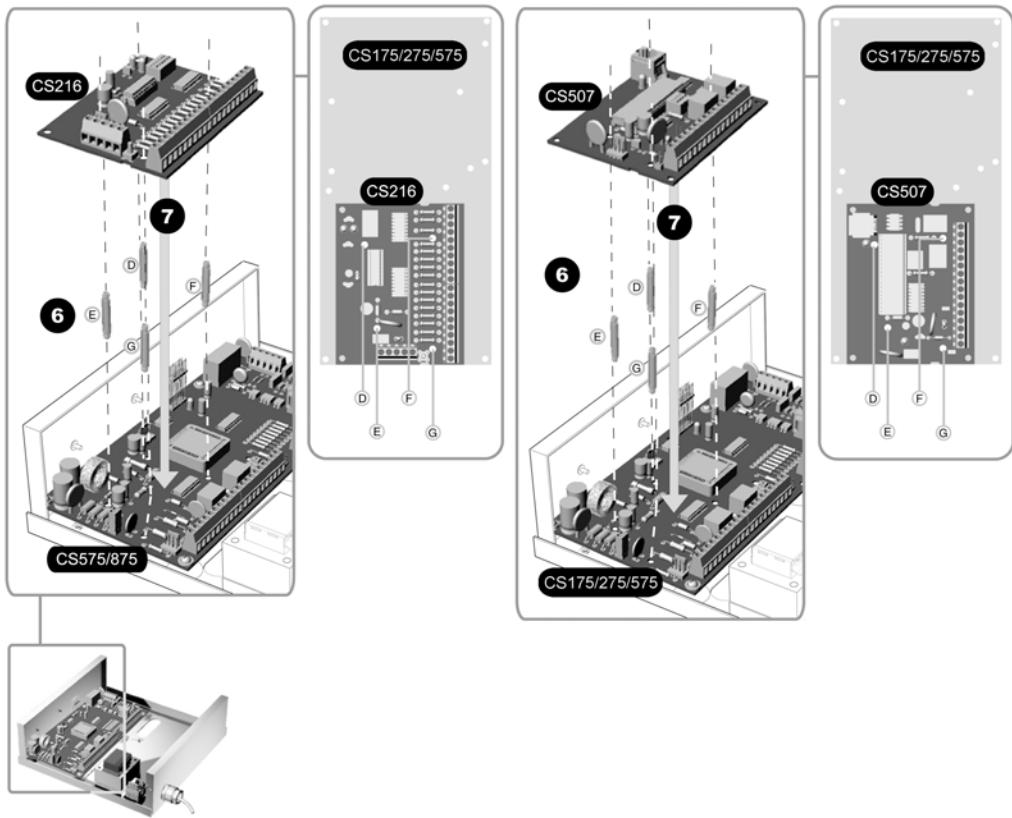
4.4.3 CS175M/CS275M/CS575SM (small metal housing)

This is a small metal housing that can be used with the CS175, CS275 and CS575.



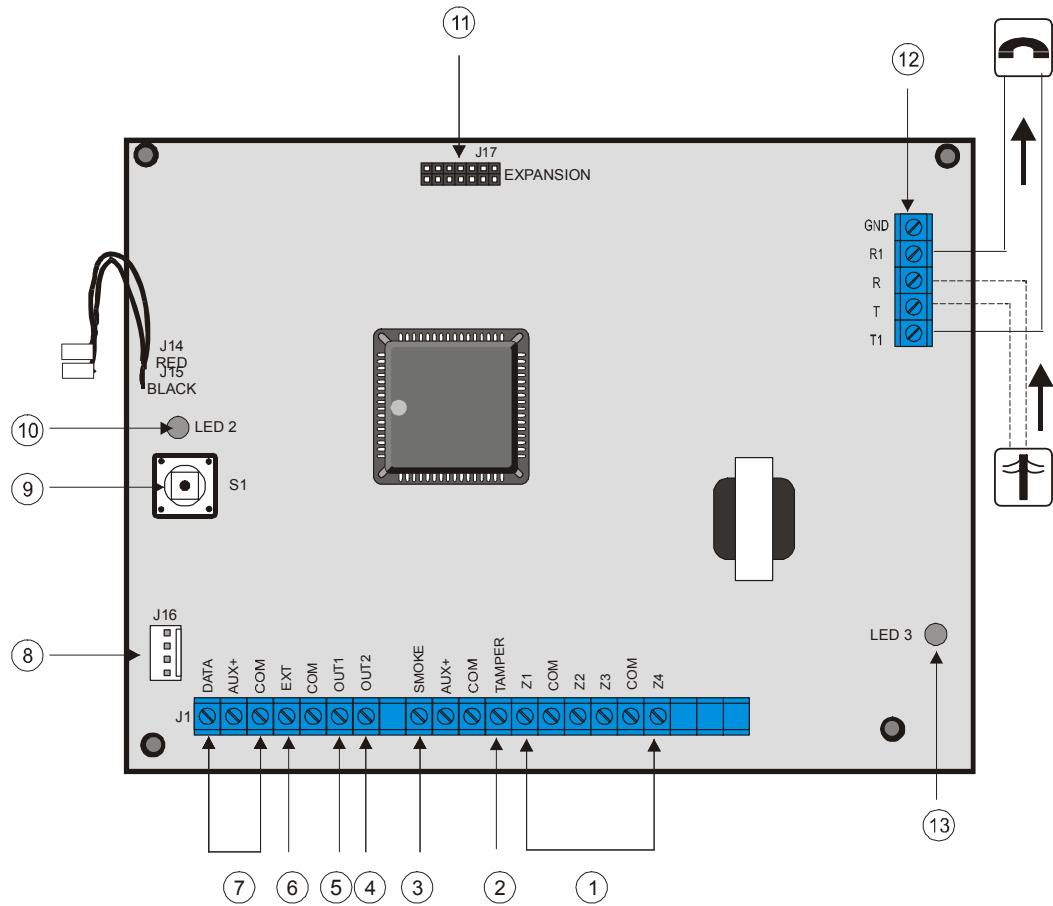
Steps

1. Open the box.
2. Wire the panel.
3. Attach the pillars for the CS534 listen-in module or CS535 voice module to the main board.
4. Mount the CS534 listen-in module or CS535 voice module to the extension gate (jumper).
5. Mount the CS534 listen-in module or CS535 voice module on the pillars to the main board.



6. Add the pillars for the CS216 input expander or CS507 output expander to the main board.
7. Mount the CS216 input expander or CS507 output expander.
8. Wire the keypad bus for all modules. See the modules for wiring instructions.
9. Connect the battery and power up the panel.

4.5 Control unit wiring diagram: CS-175



1	Zones 1-4	6	External sounder	11	Serial expansion
2	Box tamper input	7	Keypad bus	12	Phone line connector
3	Fire detector reset output	8	Additional keypad bus connection	13	Phone line communication LED
4	Open collector 2	9	Lid tamper		
5	Open collector 1	10	Bus supervision LED		

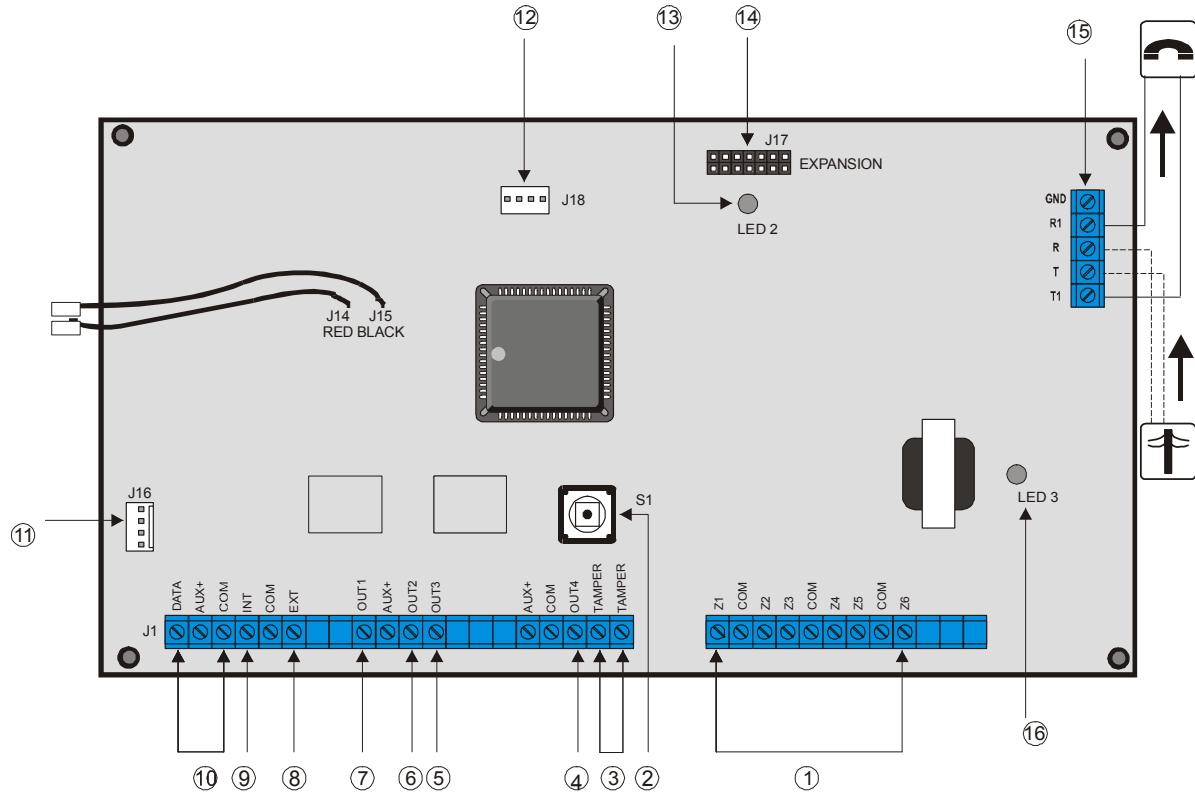
4.5.1 Inputs and outputs

CS175



DATA	Communication/Expander data (0101) (Including Keypad)
AUX +	Communication/Expander power (Including Keypad)
COM	Communication/Expander ground (Including Keypad)
EXT	External bell return
COM	Ground
OUT 1	Output 1
OUT 2	Output 2
SMOKE	Fire detector reset output
AUX +	Power
COM	Ground
TAMPER	Tamper loop
Z1	Zone 1
COM	Ground
Z2	Zone 2
Z3	Zone 3
COM	Ground
Z4	Zone 4

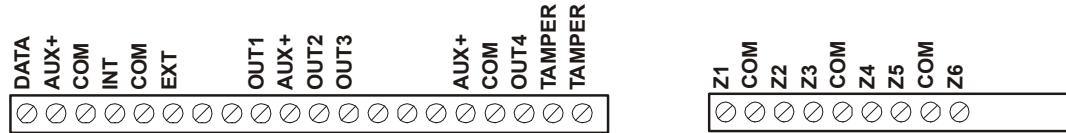
4.6 Control unit wiring diagram: CS-275



1	Zones 1-6	7	Open collector 1	12	Serial expansion
2	Lid tamper	8	External sounder	13	Bus supervision LED
3	Box tamper input	9	Internal sounder	14	Full expansion port
4	Open collector 4 2-wire smoke	10	Keypad bus	15	Phone line connector
5	Open collector 3	11	Additional keypad bus connection	16	Phone line communication LED 3
6	Open collector 2				

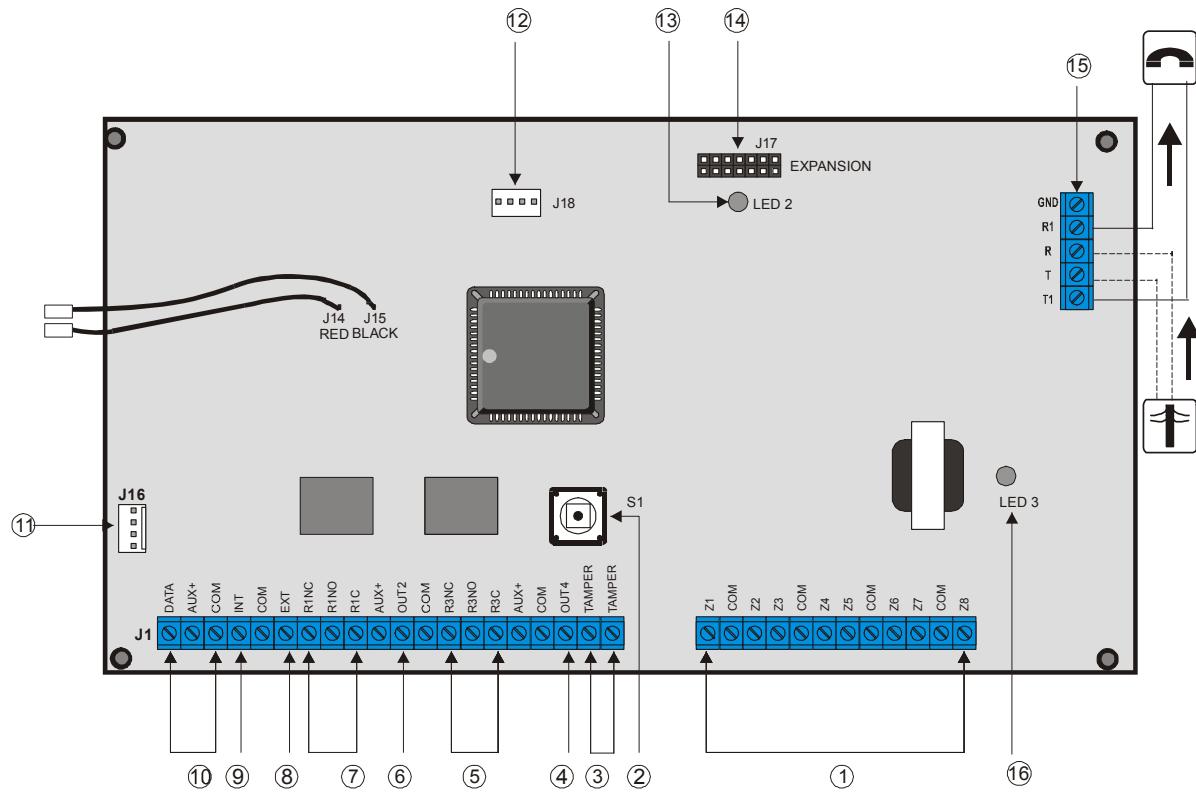
4.6.1 Inputs and outputs

CS275



DATA	Communication/Expander data (0101) (Including Keypad)
AUX +	Communication/Expander power (Including Keypad)
COM	Communication/Expander ground (Including Keypad)
INT	Internal bell return
COM	Ground
EXT	External bell return
OUT1	Output 1
AUX +	Power
OUT 2	Output 2
OUT 3	Output 3
AUX +	Power
COM	Ground
OUT 4	Output 4
TAMPER	Tamper loop
Z1	Zone 1
COM	Ground
Z2	Zone 2
Z3	Zone 3
COM	Ground
Z4	Zone 4
Z5	Zone 5
COM	Ground
Z6	Zone 6

4.7 Control unit wiring diagram: CS-575 and CS-875



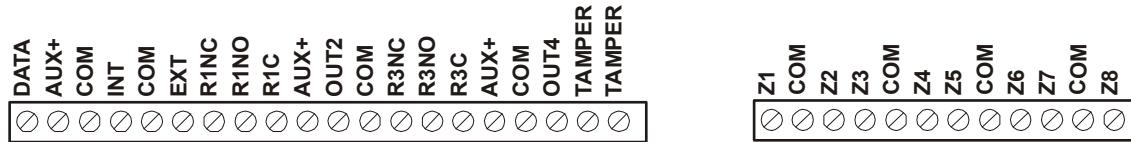
1	Zones 1-8	7	Relay 1	12	Serial expansion
2	Lid tamper *	8	External sounder	13	Bus supervision LED
3	Box tamper input *	9	Internal sounder	14	Full expansion port
4	Open collector 4 2-wire smoke	10	Keypad bus	15	Phone line connector
5	Relay 3	11	Additional keypad bus connection	16	Phone line communication LED
6	Open collector 2				



* Always use in parallel. Only one or the other can be used.

4.7.1 Inputs and outputs

CS575 and CS875



DATA	Communication/Expander data (0101) (Including Keypad)
AUX +	Communication/Expander power (Including Keypad)
COM	Communication/Expander ground (Including Keypad)
INT	Internal bell power
COM	Ground
EXT	External bell return
R1NC	Relay 1 (normally closed)
R1NO	Relay 1 (normally open)
R1C	Relay 1 (ground)
AUX +	Power
OUT 2	Output 2
COM	Ground
R3NC	Relay 3 (normally closed)
R3NO	Relay 3 (normally open)
R3C	Relay 3 (ground)
AUX +	Power
COM	Ground
OUT 4	Output 4
TAMPER	Tamper loop
Z1	Zone 1
COM	Ground
Z2	Zone 2
Z3	Zone 3
COM	Ground
Z4	Zone 4
Z5	Zone 5
COM	Ground
Z6	Zone 6
Z7	Zone 7
COM	Ground
Z8	Zone 8

5 LCD - LED KEYPAD



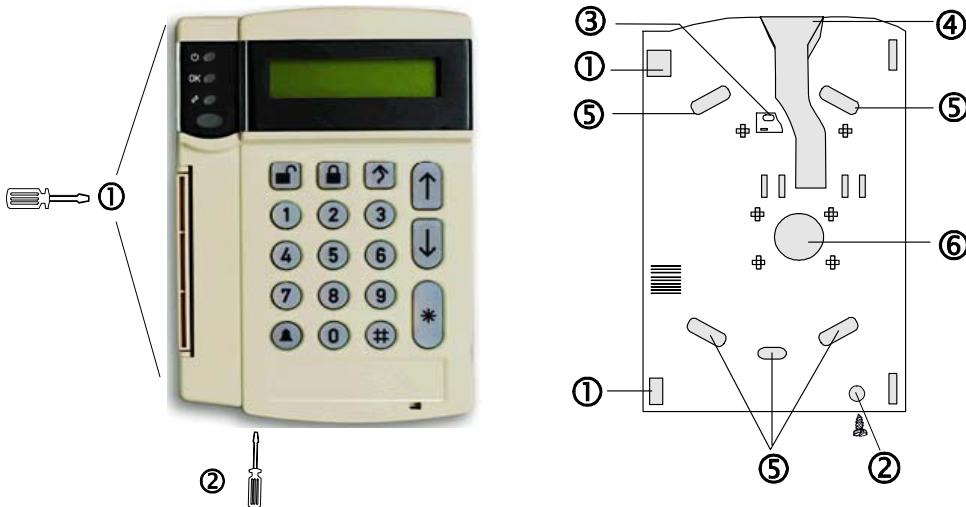
		Power (green)	When lit, the system is powered up.
		Ready (green)	The Ready LED is on when the system is ready to arm and flashes when the system is ready to force arm. If the LED is off, the system cannot be armed, generally because there is a zone fault.
		Fire (red)	When the Fire LED is lit, a fire zone has been faulted. A rapidly flashing Fire LED means that there is a problem with the fire zone.
		Armed (LED Only)	The Armed LED is on when the system is armed. It is off when the system is disarmed. It flashes when there has been an alarm during the previous arm cycle.
		Bypass (LED Only)	The Bypass LED is on when any zone is bypassed in the partition to which the LED keypad has been assigned.
		Service (LED Only)	The Service LED is on when the security system requires service. If it is on, press the * key followed by the 2 key to determine the service condition. One or more zone LEDs illuminate to indicate the service(s) required. Call your service provider immediately. See Appendix 4 for a list of service messages.
		Stay	Press to part arm your system. All interior zones are disarmed but the perimeter remains protected.
		Exit	Press to arm all zones before leaving.
		Bypass	Press to bypass zones.
		Navigation keys	Press to scroll through lists and options on the LCD display.

	Chime	Press to turn the chime on and off.
	Hash key	Press to access modules and locations.
	Star	Press to access tasks and select and enter data.

5.1 Installing the keypad

You need to install at least one keypad to set up the system.

5.2 Mounting the keypad



- 1 Opening clips
- 2 Mandatory screw
- 3 Pry off tamper screw

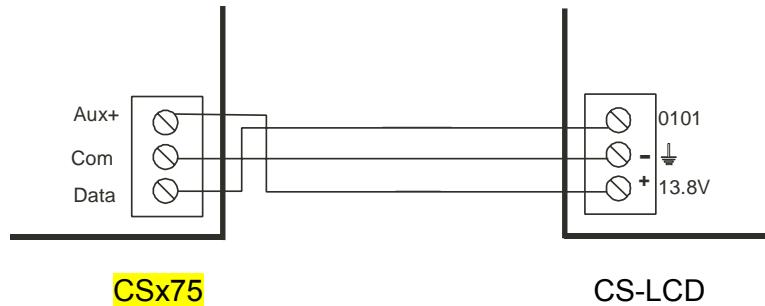
- 4 Wire trunking
- 5 Mounting holes
- 6 Wire cutout hole

Steps

1. Remove screw, if fitted.
2. Push in clips with a screwdriver.
3. Lift up lid.
4. Mount the keypad on the wall using the mounting holes.
5. Use the wire trunking or wire cutout hole to place the wires in the keypad.
6. Attach the rear tamper screw if desired.
7. Reattach the base and lid.

5.3 Wiring the keypad

The keypad should be wired to the control unit as follows.



5.4 Wiring the keypads together

The total cable length of wiring is restricted to 800 m. The following table lists the wire gauge that should be used. These numbers are for one keypad at the end of the wire. When connecting more than one keypad to the end of the wire, a higher gauge wire is required.

Length in meters	Connected to CSx75	
	Wire mm ²	
110	0.50	
200	0.75	
333	1.00	
500	1.50	
800	2.50	

The maximum number of keypads you can connect to the control panel is the number of partitions multiplied by eight. The CS175 supports a maximum of eight keypads, the CS275 supports a maximum of 16 keypads and the [CS575 and CS875](#) support a maximum of [32](#) keypads.

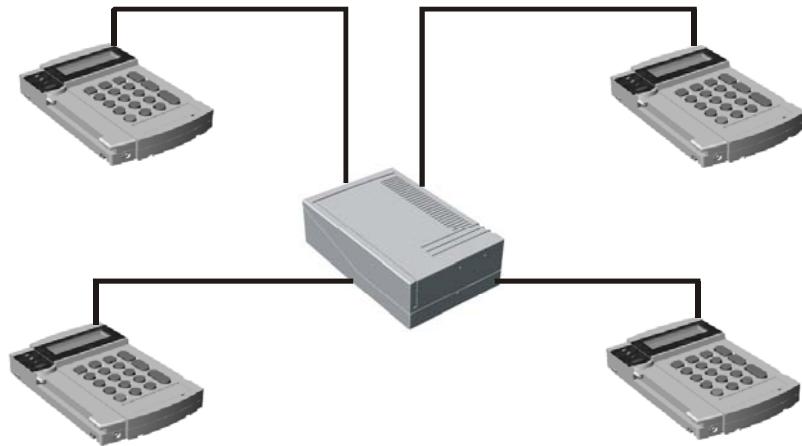
5.4.1 Multidrop network

In a multidrop network, keypads are chained together. Each keypad is connected in parallel to the one before it.



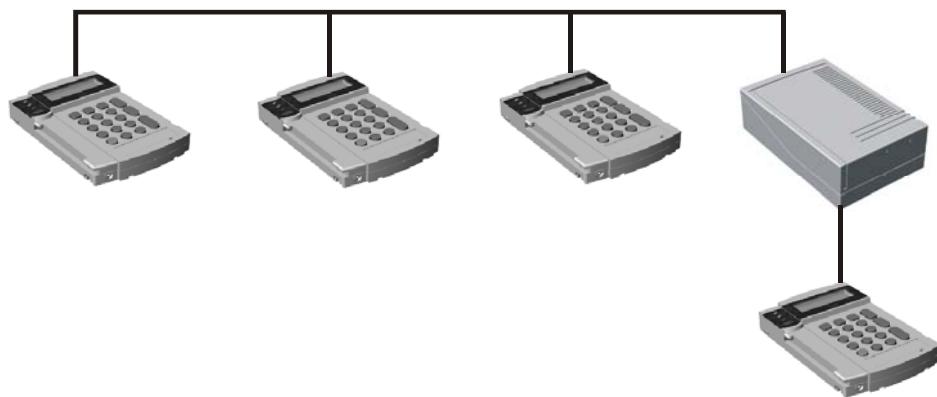
5.4.2 Star network

In a star network, each keypad is wired back separately to the control unit terminals.



5.4.3 Star and multidrop network

You can create a combination of a star and multidrop network. The following diagram shows how four keypads can be connected using both methods.



6 WIRING ZONES

6.1 General

The control unit inputs are set up as standard EOL (4K7) freely programmable zones. However, by programming the zones as dual loop, all control unit zone inputs can be programmed to provide alarm and tamper indications on the same zone.

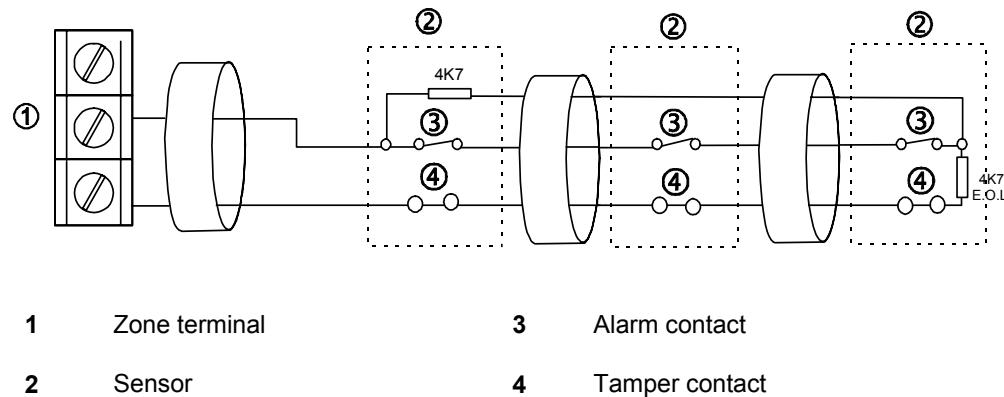
6.2 Dual wiring

One zone includes both alarm and tamper wiring.

The alarm devices are wired in series and a 4K7 resistor is fitted in parallel across the closed circuit contacts.

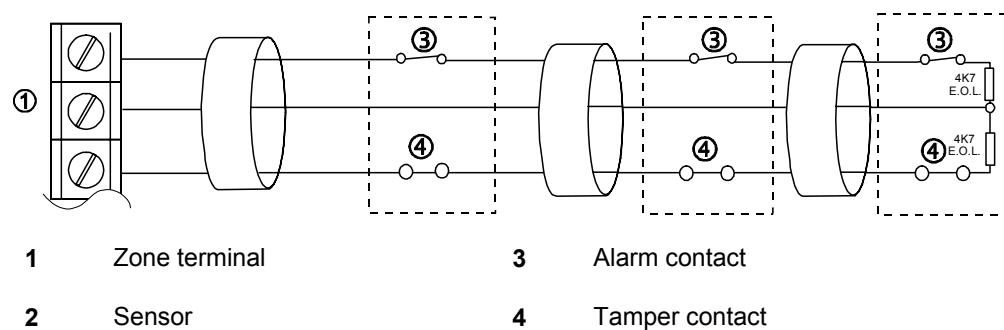
The tamper contacts are wired in series with a 4K7 EOL resistor.

- All devices closed - loop resistance is 4K7.
- Tamper device open - loop is an open or short circuit.
- Alarm device open - loop resistance is 9K4 (EOL resistor PLUS parallel resistor).



6.3 Single wiring

Two zones are required, one zone for alarm and one zone for tamper. The tamper contacts are wired in series with a 4K7 EOL resistor.



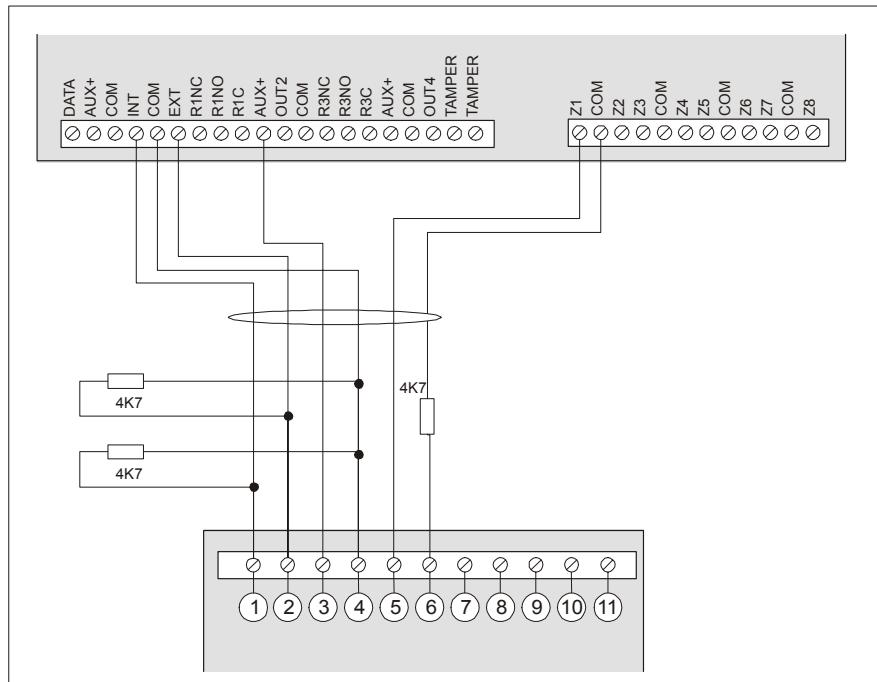
7 WIRING SOUNDERS

7.1 Wiring a sounder with EOL protection

Any zone can be used. It should be programmed as tamper and single EOL.

7.2 AS500

CSx75



AS500

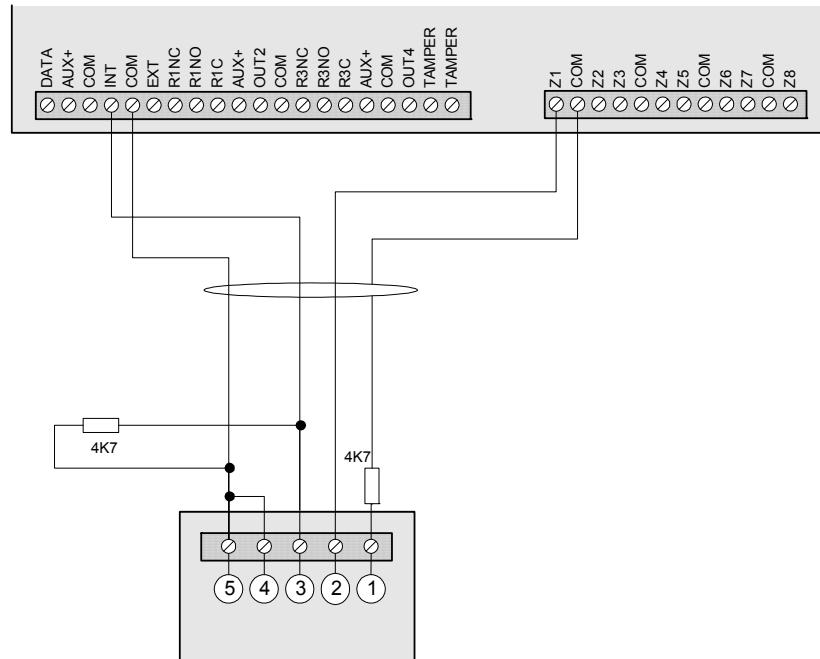
1	Beacon hold off	5	Tamper	9	Piezo
2	Siren hold off	6	Tamper	10	Piezo
3	+13.8 V	7	Beacon	11	Piezo
4	GND	8	Beacon		



In all cases, select negative hold off on the sounder.

7.3 AS271

CSx75



AS271

1 Tamper

4 0 V speaker

2 Tamper

5 0 V beacon (AS271 only)

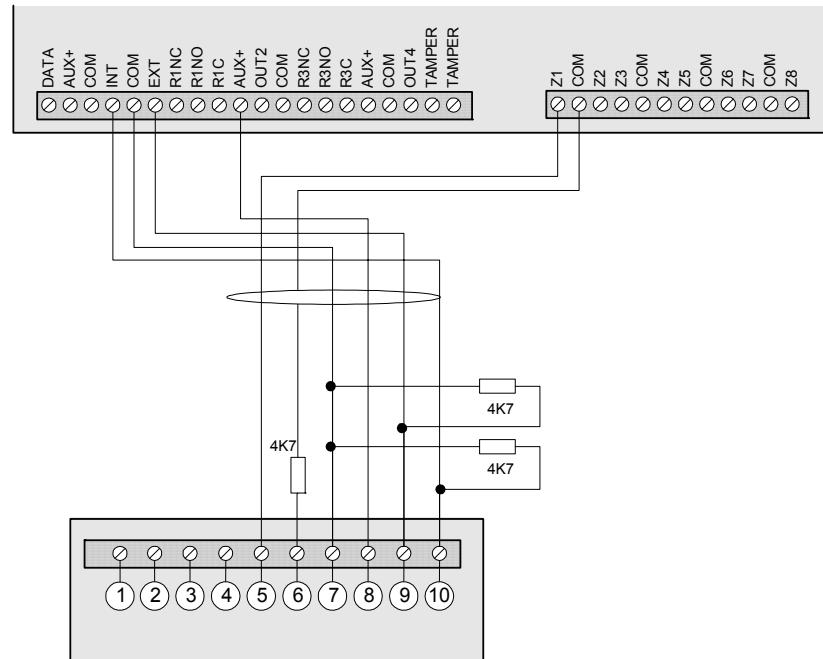
3 +13.8 V



This wiring configuration for the AS271 allows the beacon to follow the internal sounder.

7.4 AS290/390

CSx75



AS290/AS390

1	Piezo	4	Beacon	7	GND
2	Piezo	5	Tamper	8	+13.8 V
3	Beacon	6	Tamper	9	Siren hold off
				10	Beacon hold off



Cut jumpers 5 and 7 for negative hold off on the sounder.

8 WIRING FIRE DETECTORS

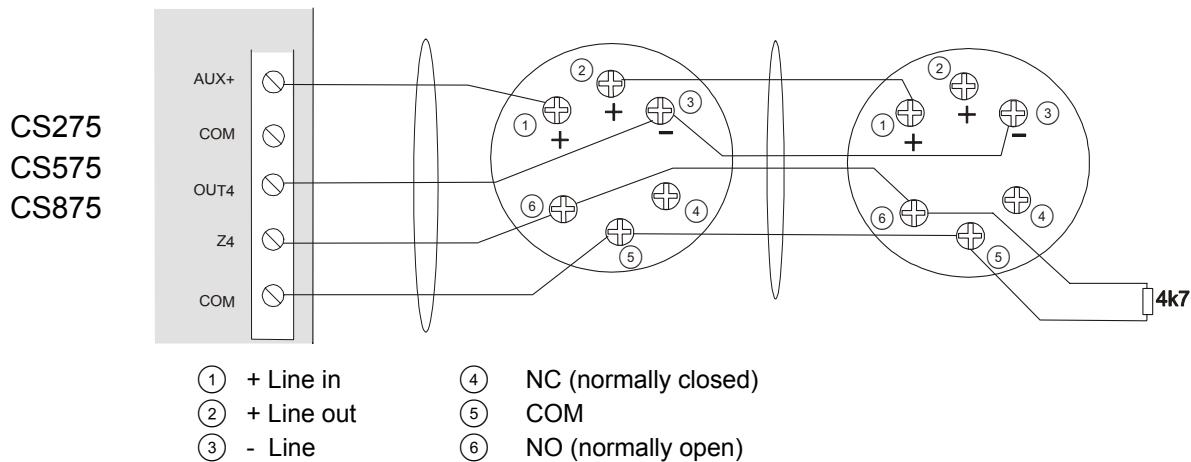
8.1 General

If you need to drive more than one 4-wire fire detector, you may need to use a relay.

8.1.1 4-wire fire detector (CS275-575-875)

DB702 + DP721R

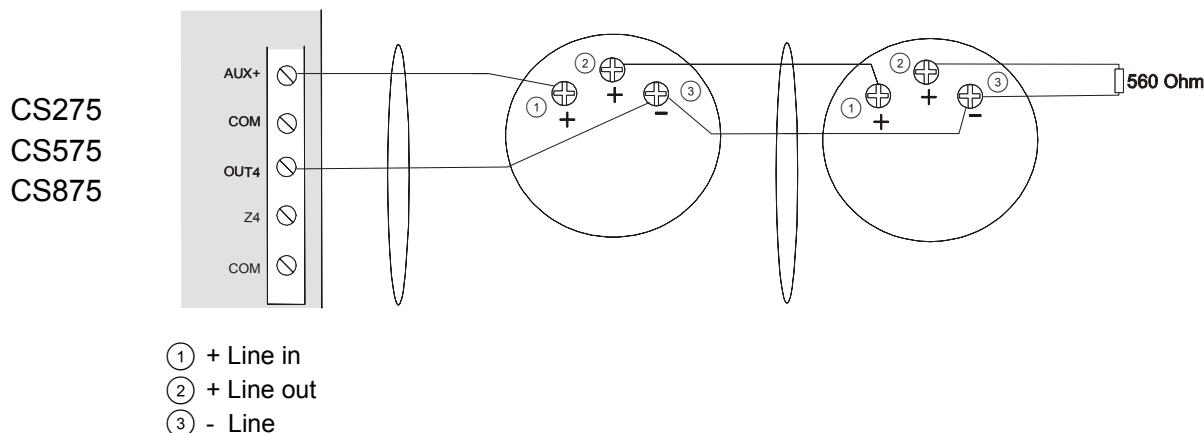
DB702 + DP721R



8.1.2 2-wire fire detector (CS275-575-875)

DB701 + DP721

DB701 + DP721



The fire detector power is connected to aux and output 4.

Change location 51 segment 2 option 5 to On

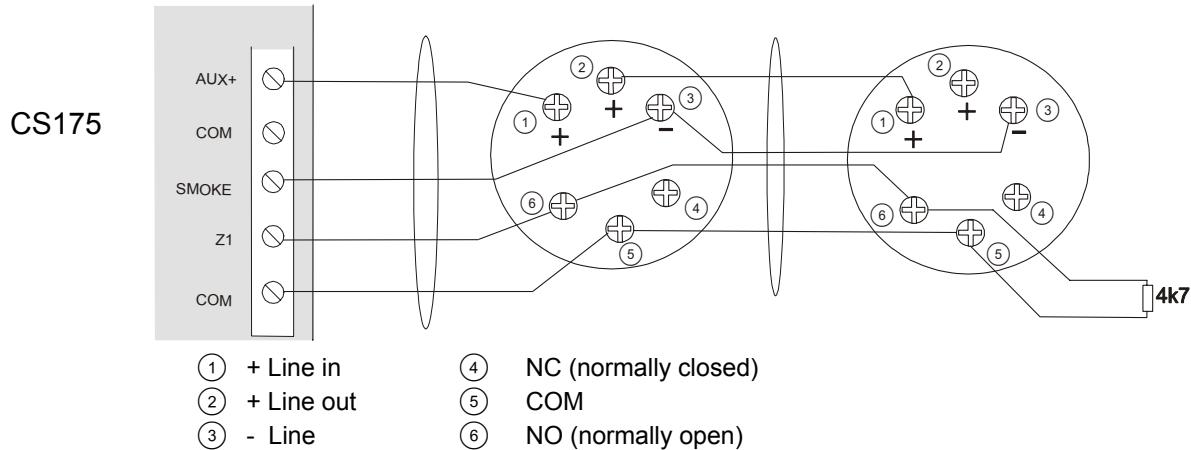
The fire alarm is always activated as alarm on zone 8

The maximum number of fire detectors to be connected is three.

8.1.3 4-wire fire detector (CS175)

DB702 + DP721R

DB702 + DP721R



8.2 Fire escape planning

If fire detectors are wired as part of the system, it is important that you help the owner create an escape plan. Ensure that the plan is quick and that all members of the household have practised it.

An escape plan should include:

- Planning an escape route from all parts of the house, especially the sleeping quarters.
- Planning assistance for children, the elderly and the infirm.
- Ensuring access to the ground from the upstairs even if the staircase goes on fire.
- Creating an assembly point.

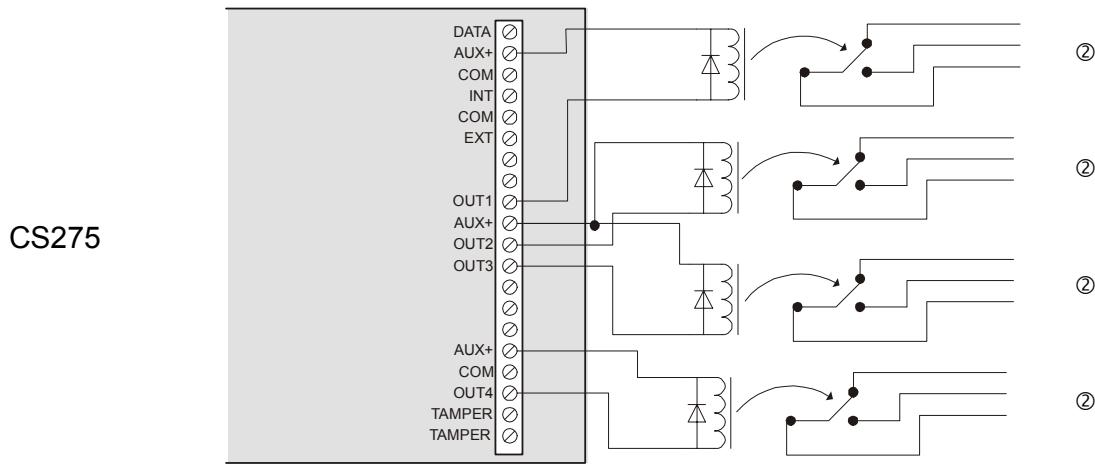
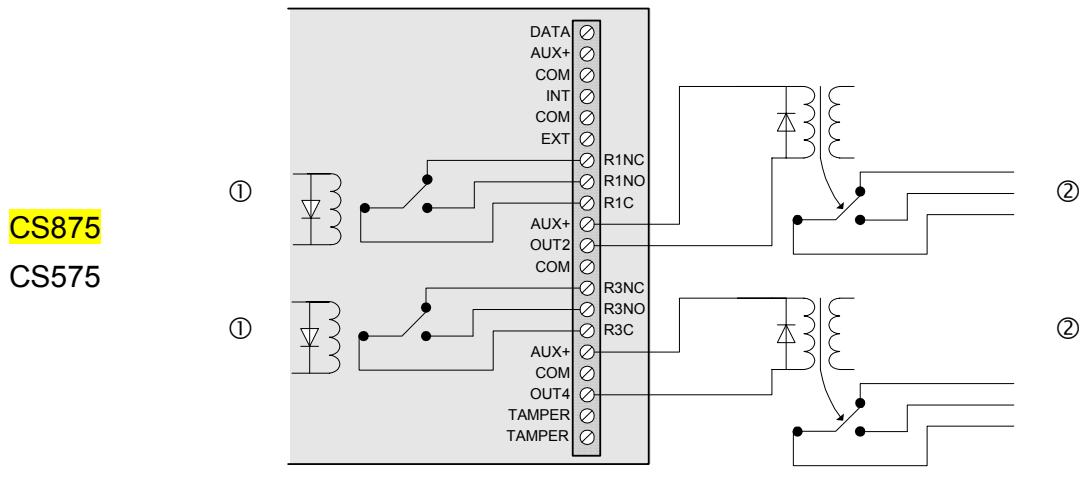
Regular testing of smoke detectors is necessary in order to verify the proper functioning of your system.

9 WIRING THE OUTPUTS

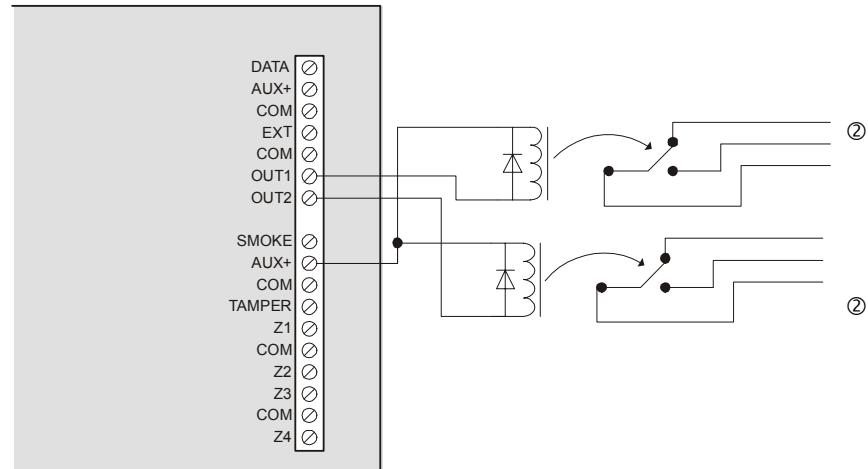
9.1 Wiring the outputs

The amount and type of available outputs is different per panel type. See *Introducing the CSx75 system* on page 7 for more information. The CS875 and CS575 have two open collector outputs and two relay outputs. The CS275 has four open collector outputs and the CS175 has only two open collector outputs.

The open collector outputs control additional relays and are limited to 40 mA maximum.



CS175



- 1** 1A rated contacts. Relays are powered and switched from the panel. No external power is needed to switch the relays.
- 2** Digital outputs limited to 40 mA.

10 PROGRAMMING THE SYSTEM

10.1 Enrolling modules and keypads

The CSx75 can automatically find and store in its memory all keypads, zone expanders, wireless receivers and any other module connected to the data terminal. This allows these modules to be supervised by the control panel.

Steps

1. Press ***8**.
2. Enter a Go to program code. The default code is 1278 for a four-digit code or 127800 for a six-digit code.
3. Press the **Exit** key to leave programming mode. When you leave programming mode, the **CSx75** automatically enrolls the devices. The enrolling process takes about 12 seconds. User codes are not accepted during this time.

10.2 Programming the LCD keypads

This section describes how to program the address, partition and available options for each LCD keypad.

10.2.1 Changing the keypad number and partition

You must set the partition and keypad number for the current keypad. The keypad can connect to the bus only after you set these numbers.

1. Press ***94**.
2. Enter a Go to program code.
3. Enter the keypad number (1-8).
4. Press *****.
5. Enter the partition number. The keypad automatically exits this mode.

10.2.2 Adjusting the view / brightness of the LCD

1. Press ***91**.
2. Enter a master user code. The LCD prompts you to change the view.
3. Use the scroll keys to raise or lower the text view.
4. To advance to the brightness option, press *****. The LCD prompts you to change the LCD lighting.
5. Use the scroll keys to increase or decrease the brightness.
6. When you have finished making changes, press ***** to exit.

10.2.3 Setting keypad options

1. Press ***93**.
2. Enter a Go to program code.
3. Set the keypad features listed in the following table. Press **0** to turn a feature off. Press **1** to turn a feature on.
4. When you have finished setting the options, press ***** to display the additional feature selection and then set these features. Press **0** to turn a feature off. Press **1** to turn a feature on.

Keypad Feature Enabled	
Case Tamper on?	Reports any keypad tamper.
Silent Keypad?	Silences the entry/exit sounder and chime only.
Ding dong chime?	If off, the chime is a single tone. See <i>Location 52</i> on page 71 for more information.
5 sec silence	Silences the pulsing keypad sounder for five seconds when a key is pressed.
Armed zone info?	Does not allow the keypad to display faulted or bypassed zones when the system is armed.
Beep on panics?	Sounds a short beep to verify that the keypress is accepted.
Disable service?	Turns off the service required message.
Master keypad?	Enables temporary viewing of all partitions when *1 is pressed followed by the partition number.
Custom message?	Uses the custom message. See <i>Programming custom messages</i> on page 44 for information.
Clock?	Displays the date and time.
Custom message lock?	Locks the custom message. See <i>Programming custom messages</i> on page 44 for more information.

Additional Keypad Features	
Option 1	Displays the menu. Press * for help.
Option 2	Disables LED extinguish on this keypad.
Option 3	On hides the PIN when programming.
Option 4	On suppresses beeps when an RF transmission is lost.
Option 5-8	Reserved

10.2.4 Setting elapsed increments since last autotest

1. Press ***95**.
2. Enter a Go to program code.
3. Enter a three-digit number and press **#**.

10.2.5 Setting the system time and date

1. Press ***96**.
2. Enter a master user code.
3. Use the scroll keys to change the settings.
4. Press ***** between each part of the date and time.

10.2.6 Setting the light control for X-10 devices

1. Press ***47**. The keypad prompts you to select a light number between 0 and 9.
2. Enter the number of the device you want to edit. The keypad displays the light number and prompts you to turn the light on or off.
3. Use the scroll keys to turn the device on or off.
4. The keypad prompts you to select a light number between 0 and 9.
5. Repeat steps 2 and 3 until complete.
6. Press **#** to exit.

10.2.7 Setting the unit and house codes for X-10 devices

1. Press ***48**.
2. Enter a Go to program code.
3. Enter the unit code and press *****. The keypad prompts you to enter the house code.
4. Enter the house code and press *****. The keypad increments to the next light number and prompts you to enter the unit code.
5. Repeat steps 2 and 3 until complete.
6. Press **#** to exit.

10.2.8 Changing user codes

1. Press ***5**.
2. Enter a master user code. The Ready LED flashes.
3. Enter a two-digit user number, For example, 03 is user 3. The keypad displays the current code for this user. Stars (*) represent blanks.

4. Enter the new user code for the selected user. If you are changing the current code, use the scroll keys to select the digit to change and then enter the correct number. If the code is rejected, the sounder beeps three times. To delete a user code, press ******** for a four-digit code or ********* for a six-digit code.
5. To edit another user code, return to step 2 and enter the user code.
6. Press **#** to exit.

10.2.9 Assigning authority level

You must assign user codes before assigning authority levels. To set a user's access to a particular partition, you must have access to the partition.

Steps

1. Press ***6**.
2. Enter a master user code. The keypad prompts you to enter a user number.
3. Enter a two-digit user number. For example, 03 is user 3.
4. Set the attributes in the following table for the selected user. Press **0** to turn an attribute off. Press **1** to turn an attribute on.
 - When programming codes that activate outputs, you must also configure the output events. See *Location 59* on page 73 for more information.
 - When you set Outputs Used? to 1, the options Output 4, Output 3, Output 2 and Output 1 are displayed. Press ***** to continue without editing these options.

User Attributes	
Outputs used?	Output 4 ? Output 3 ? Output 2 ? Output 1?
Open / Close Rprt?	
Bypass enable?	
Arm / Disarm?	
Master code?	
Sched arm only?	
Arm only?	

5. Press *****. The partition enable section is displayed. The keypad displays the partitions the selected user can access.

6. To remove access to a partition, press the partition number on the keypad. The partition is marked with a hyphen(-) to indicate that the user can no longer access it. To grant the user access to a partition, press the partition number again.
7. Press * to save the changes. The keypad prompts you to enter another user code.
8. To edit another user's authority level, return to step 3. Otherwise, press # to exit without saving your changes.



Any master arm/disarm code can add or change a user code if the master code has access to the same partitions as that code.

When programming user codes for a partitioned system, leave at least one code with access to all partitions to allow new users to be added. This can be the Go to program code if it is enabled in Location 55. To allow a user add new codes, remove the partition authority from all blank codes.

10.2.10 Calling back for download

Press *98 while the system is disarmed to perform a call back for a download.



*A valid user code may be required after *98 if this option is enabled in Location 53. See Location 53 on page 71 for more information.*

10.2.11 Seizing the phone line for download

Press *99 while the system is disarmed to make the control panel seize the phone line for a download.



*A valid user code may be required after *99 if this option is enabled in Location 53. See Location 53 on page 71 for more information.*

10.2.12 Programming custom messages

Zone messages may be entered into the LCD one at a time or by downloading.

The custom message lock prevents messages being copied to the selected keypad. This feature is used frequently when a system is partitioned and the users of one partition have different messages than users of the other partition. If you do not use the custom message lock, the messages programmed into the keypad are copied to all other keypads in the system.

Special Keys

When you are entering custom messages into the LCD keypad, the keys on the keypad take on different functions to simplify message programming.

	Star	Press to enter data or move the cursor to the right if no data is entered.
	Hash key	Press to leave the message.

	Scroll keys	Press to scroll through letters and lists on the keypad display.
	Stay	Press to insert a space.
	Chime	Press to delete characters.
	Exit	Press to access the library.

Steps

1. Press ***92**.
2. Enter a Go to program code.
3. The keypad prompts you to enter messages for zones **1-168** and **193-196**. Press **#** after each message.
 - Message 1 – Descriptor zone 1.
 - Message 2 – Descriptor zone 2.
 - ...
 - Message **168** – Descriptor zone **168**.
 - Message 193 – Custom message top line.
 - Message 194 – Custom message bottom line.
 - Message 195 – Shutdown message top line.
 - Message 196 – Shutdown message bottom line.
4. When you are finished entering messages, press **#** and the **Exit** key. Any changes you have made are copied to other LCD keypads on the system. To display different messages on other LCD keypads, press ***93** to enable the custom message lock.

10.3 Programming the LED keypads

This section describes how to program the address, partition and available options for each LED keypad.

10.3.1 Changing the keypad number and partition

You must set the partition and keypad number for the current keypad. The keypad can connect to the bus only after you set these numbers.

Steps

1. Press ***94**.

2. Enter a Go to program code.
3. Enter the keypad number (1-8). The Bypass LED and the Service LED blink and the current keypad number is displayed.
4. Press *. The Bypass LED flashes and the current partition is displayed.
5. Enter the partition number. The keypad automatically exits this mode.

10.3.2 Setting the starting zone

This section describes how to program the starting zone of the keypad. The zone LED displayed on the keypad starts from the number set as the starting zone.

Steps

1. Press ***92**.
2. Enter a Go to program code.
3. Enter the starting zone for the current keypad (1-32).
4. Press *.

10.3.3 Setting keypad options

1. Press ***93**.
2. Enter a Go to program code. The Service LED blinks.
3. Turn LEDs 1-8 on or off to enable or disable the functions in the following table.
4. Press * after each option.

Keypad Feature Enabled	
LED1: Case Tamper on?	Reports any keypad tamper.
LED2: Silent Keypad?	Silences the entry/exit sounder and chime only.
LED3: Ding dong chime?	If off, the chime is a single tone.
LED4: 5 sec silence	Silences the pulsing keypad sounder for five seconds when a key is pressed.
LED5: Armed zone info?	Does not allow the keypad to display faulted or bypassed zones when the system is armed.
LED6: Beep on panics?	Sounds a short beep to verify that the keypress was accepted.
LED7: Disable service?	Turns automatic testing of the keypad on or off.
LED8: Master keypad?	Enables temporary viewing of all partitions when *1 are pressed followed by the partition number.

10.3.4 Setting elapsed increments since last autotest

1. Press ***95**.

2. Enter a Go to program code.
3. Enter [100's digit] -[10's digit]-[1's digit]-[#] and press #.

10.3.5 Setting the system date

1. Press *96.
2. Enter a master user code. The Service LED blinks.
3. Enter the day of the week. 1=Sunday, 2=Monday, 3=Tuesday, 4=Wednesday, 5=Thursday, 6=Friday, 7=Saturday.
4. Enter the month. This is a two-digit code. 01=January, 02=February, 03=March, 04=April, 05=May, 06=June, 07=July, 08=August, 09=September, 10=October, 11=November, 12=December.
5. Enter the day. This is a two-digit code.
6. Enter the year. This is a two-digit code.

10.3.6 Setting the system clock

1. Press *97.
2. Enter a master user code. The Service LED blinks.
3. Enter the hour. This is a two-digit code.
4. Enter the minutes. This is a two-digit code.

10.3.7 Changing user codes

1. Press *5.
2. Enter a master user code. The Ready LED flashes.
3. Enter a two-digit user number, for example, 03 is user 3.
4. Enter the new user code for the selected user.
5. The Ready LED flashes to indicate that the code is accepted. If the code is rejected, the sounder beeps three times. The zone LEDs illuminate the first digit of the user code. (LEDs 1-8 on = code is blank; LEDs 1-8 off = 0; LEDs 1 and 8= 9.)
6. Use the scroll keys to view the next digit or enter a new four-digit or six-digit user code. Press any digit to overwrite the existing digit and move to the next digit.
7. To edit another user code, return to step 2.
8. To exit, press #.

10.3.8 Assigning authority level

You must assign user codes before assigning authority levels. To set a user's access to a particular partition, you must have access to the partition.

Steps

1. Press ***6**.
2. Enter a master user code. The keypad prompts you to enter a user number.
3. Enter a two-digit user number. The Ready LED is constant and the Bypass LED flashes.
4. The illuminated LEDs indicate the authority levels assigned to the selected user. An explanation of the LEDs is listed in the following table. Press the relevant number to turn an authority level on or off.

User Attributes : if LED8 is OFF	
LED1	Reserved. Do not change if on.
LED2	Arm Only
LED3	Arm Only After Close Window.
LED4	Master arm/disarm (can program other codes).
LED5	Arm/disarm code.
LED6	Allowed to bypass zones.
LED7	Code will send open / close reports.
LED8	If this LED is on, this code is programmed as a function code. Do not change, Press [#] - [#] to exit.

User Attributes : if LED8 is ON	
LED1	Activate output #1
LED2	Activate output # 2
LED3	Activate output # 3
LED4	Activate output # 4
LED5	Arm/disarm
LED6	Bypass zones
LED7	Open/Close reporting
LED 8	If this LED is off, LEDs 1 to 7 indicate the attributes listed the table above.

5. Press *****.
6. The partition enable section is displayed. This tells the system the partition the selected user can arm/disarm. To change any of these numbers, press **1 to 8** to permit or deny access to the user.
7. LEDs **1 to 8** illuminate the partitions the user can access. To deny the user access to a partition, press the relevant number on the keypad. For example, if

LED 2 is lit, the user can access partition 2. Press **2** to deny the user access to the partition and to turn off LED 2.

8. Press ***** to save the changes. The keypad prompts you to enter another user code.
9. To edit another user's authority level, return to step 3. Otherwise, press **#** to exit.

 *Any master arm/disarm code can add or change a user code if the master code has access to the same partitions as that code.*

 *When programming user codes for a partitioned system, leave at least one code with access to all partitions to allow new users to be added. This can be the Go to program code if it is enabled in Location 55. To allow a user add new codes, remove the partition authority from all blank codes.*

10.3.9 Calling back for download

Press ***98** while the system is disarmed, to perform a call back for a download.



*A valid user code may be required after ***98** if this option is enabled in location 53. See Location 53 on page 71 for more information.*

10.3.10 Seizing the phone line for download

Press ***99** while the system is disarmed, to make the control panel seize the phone line for a download.



*A valid user code may be required after ***99** if this option is enabled in location 53. See Location 53 on page 71 for more information.*

10.3.11 Memorising tamper-alarms

Indications of tamper alarms from a detector or housing can be reset only in programming mode. This means that only the installer can reset tampers.

10.3.12 Blocking tamper alarms

Tamper alarms from a detector or housing are blocked and are not transmitted to the central station when the system is in programming mode. This allows you to test and maintain the system without causing unnecessary tamper alarms.

10.3.13 Blocking the keypad due to too many incorrect codes

The **CSx75** can be programmed to block the keypad for 60 seconds and send a tamper alarm to the central station when more than 30 keypresses are made on a keypad without entering a correct user code.

11 PROGRAMMING MODULES AND LOCATIONS

11.1 Parts of the system

The system is divided into modules, locations, segments and bits. The control panel is one module. Each module contains locations, which in turn, contain one or more segments. Each segment has between one to eight bits of programmable data. See *Programming* on page 56 for a list of locations.

11.2 Programming data

The segments in each location contain the same type of data. This can be either numerical or feature selection data.

11.2.1 Numerical Data (ND)

Numerical data is programmed by entering a number from 0 to 255 using the keypad keys.

On an LCD keypad, the number in the location is displayed. For locations with a maximum of 15, for example the phone prefix in Location 1, the hexadecimal equivalent is displayed in parenthesis.

10 = 10(A)

12 = 12(C)

14 = 14(E)

11 = 11(B)

13 = 13(D)

15 = 15(F)

On an LED keypad, the LEDs for zones 1 to 8 are utilised and the numeric equivalents of their illuminated LEDs are added together to determine the data in a programming location. The numeric equivalents of these LEDs are as follows:

Zone 1 LED = 1

Zone 5 LED = 16

Zone 2 LED = 2

Zone 6 LED = 32

Zone 3 LED = 4

Zone 7 LED = 64

Zone 4 LED = 8

Zone 8 LED = 128

11.2.2 Feature Selection Data (FSD)

Feature selection data displays the current condition (on or off) of eight features associated with the programming location and segment selected.

On the LCD keypad, the numbers of the enabled features are displayed. If a feature is not enabled, a hyphen is displayed instead. Several features can be selected from within one segment. Enter the feature number of the segment on the keypad to turn the feature on or off.

On the LED keypad, the number of the enabled features is displayed by the corresponding LEDs.

- Press any numeric key between **1** and **8** to select a feature. The corresponding LED lights up (feature on).
- Press the number again to turn the feature off. The LED goes out (feature off).

- Several features can be selected from within one segment. For instance, if you want all eight features of a segment, press **12345678**. LEDs 1 to 8 turn on as you press the keys to indicate that those features are enabled.
- When you program the segment, press *. This enters the data and automatically advances to the next segment of the location.
- When you are in the last segment of a location, press * to enter the data and exit that location. You can now enter another programming location.

12 PROGRAMMING THE PANEL

12.1 Default programming

For most routine installations, the default programming allows a majority of the locations available with the CSx75 to be enabled, when communicating in Contact ID or SIA formats and without partitioning.

12.2 Entering programming mode

1. Press ***8**.
2. Enter a Go to program code.
3. You are now in programming mode and ready to select the module to program.
4. Enter the module number and press **#**.

12.3 Selecting a module to program

Since all modules connected to the CSx75 are programmed through the keypad, the module you are programming should be the first entry.

To program a module, enter the module number and press **#**. Not all of these modules may yet be available.

- 0** Control panel
- 16-23** Hardware expanders
- 24-31** Relay/voltage output modules
- 32-36** RF Receiver modules
- 64-68** Verification modules
- GSM** **GSM modules**

12.4 Loading factory defaults for the controller

1. Enter programming mode as described in *Entering programming mode*.
2. Press **0#** for the controller.
3. Press **910#** as the reset command.
4. The keypad beeps three times to indicate that loading is in progress. This takes about six seconds.



Other modules, such as keypads, RF receiver modules and output expanders, can be reset in the same way. See Appendix 3 for a list of keypad module numbers.

12.5 Defining the country code

1. Enter programming mode as described in *Entering programming mode* on page 54.
2. Press **0#** for the controller.
3. Press **0#** for the first location in the controller.
4. Enter the country code and press *****. When this location is changed from the keypad, the panel returns to the default country settings.

12.6 Programming via the LED keypad

12.6.1 Entering programming mode

1. Press ***8**.
2. Enter a Go to program code.
3. The Service LED blinks, prompting you to enter a module number.
4. Enter the module number and press **#**.
5. The Armed LED lights, prompting you to enter a programming location.
6. Enter the location number and press **#**. If the location is valid, the Armed LED turns off, the Ready LED lights up and the binary data for the first segment of the location is shown by the zone LEDs. While you are entering new data, the Ready LED flashes to indicate that a data change is in process. The flashing continues until the new data is stored.
7. Press ***** to save any changes you have made. The keypad displays the data in the next segment.
8. Repeat steps 4 to 7 until the last segment is reached.
9. Press **#** to exit the location.
10. The Armed LED lights up, prompting you to enter a new programming location.



You cannot enter programming mode if the system or any partition is armed. The timeout for programming mode is 15 minutes.

12.6.2 Exiting a location

- When you have programmed the last segment of a location, press ***** to exit the location and save the data. The Ready LED turns off.
- To exit before the last segment, press **#**. Any changes you have made are not saved. You can then enter another programming location.

12.6.3 Exiting programming mode

- Press the **Exit** key to leave the current programming level.
- If you do not want to program additional modules, press the **Exit** key again to exit programming mode.

- To program a module, enter its address and press **#**. See *Selecting a module to program* on page 52 for more information.

12.7 Programming via the LCD keypad

12.7.1 Entering programming mode

1. Press ***8**.

Enter a Go to program code.



You cannot enter program mode if the system or any partition is armed. The timeout for programming mode is 15 minutes.

12.7.2 Programming a location

1. Enter the location number and press **#**.
2. Enter the new data.
3. Press ***** to display the next segment and its data. Repeat steps 1 to 3 until you have programmed each segment.
4. Press **#** to leave the location.

12.7.3 Discarding new data

Press the **Chime** key to delete any changes you have made to the data. The original value is displayed.

12.7.4 Reviewing data

To review the data in a location, press ***** and do not enter any data. Each time you press *****, the programming data in the next segment is displayed.

12.7.5 Invalid data

If you attempt to program an invalid entry for a particular segment, the keypad sounder beeps three times and the keypad display remains in the segment awaiting a valid entry.

12.7.6 Exiting a location

- When you have programmed the last segment of a location, press ***** to exit the location and save the data.
- To exit before the last segment, press **#**. Any changes you have made are not saved. You can then enter another programming location.

12.7.7 Exiting programming mode

- Press the **Exit** key to leave the current programming level and move to the *Select a Module To Program* level.
- If you do not want to program additional modules, press the **Exit** key again to exit programming mode.

- To program a module, enter its address and press **#**. See *Selecting a module to program* on page 52 for more information.

13 PROGRAMMING WITH UP/DOWNLOAD SOFTWARE

13.1 General

You can program the CSx75 using the LED keypad, the LCD keypad or the UDX75 software. This software allows you to download the programming information on the control panel to the computer running the UDX75 software, change it and upload the changes from the computer to the panel. It also allows you to view the program log and event log. To program the system using this software, you must connect the control panel to the computer.

You can connect the control panel to the computer either directly via the RS232 serial port or remotely via a modem.

13.1.1 Wiring of the RS232 cable

Three wires are needed for the communication: RX, TX and GND.

13.2 Programming

Ensure the up/download access code is the same in both the up/download software and the control panel. See the table of country codes on page 10 for the correct default value.

In the control panel, you must program the locations listed in the following table.

Location	Value
Location 207: Serial Port	Segment 1: 1 = Home Automation
Location 208: Speed	Segment 1: 2 = 9600 baud
Location 209: Protocol	Segment 1: 0 = Binary
Location 210:	Segment 1: ----- Segment 2: -----
Location 211:	Segment 1: 12345678 Segment 2: 12345678 Segment 3: 12345678 Segment 4: 12345678

For the white connector.

CS575	DB 9 Connector	DB 25 Connector
1 (Closest to phone line)	2	3
2	3	2
4 (Closest to the Mains)	5	7

14 CONTROL PANEL PROGRAMMING LOCATIONS

Location	Description	Location	Description
0	Country code		Entry/Exit
	Phone set up	35	Entry / exit timers
1	Phone prefix		Zone set up
2	Phone number 1	36	Zones 1-8 zone type
3	Account code phone #1	37	Partition select, zones 18
4	Communicator format phone #1	38	Zones 9-16 zone type
5	Events reported to phone #	39	Partition select, zones 9-16
6	Phone number 2	40	Zones 17-24 zone type
7	Account code phone #	41	Partition select, zones 17-24
8	Communicator format phone #2	42	Zones 25-32 zone type group
9	Events reported to phone #2	43	Partition select, zones 25-32
10	Phone number 3	44	Zones 33-40 zone type group
11	Account code phone #3	45	Partition select, zones 33-40
12	Communicator format phone #3	46	Zones 41-48 zone type group
13	Events reported to phone #3	47	Partition select, zones 41-48
14	Phone number 4	48	Swinger shutdown count
15	Account code phone #4		System and sounder options
16	Communicator format phone #4	49	Keypad sounder control
17	Events reported to phone #4	50	Siren options
18	Phone number 5	51	System options
19	Account code phone #5	52	System timers
20	Communicator format phone #5	53	Special features
21	Events reported to phone #5		Codes
22	Phone number 6	54	Go to program code
23	Account code phone #6	55	Go to program code partition and authorisation
24	Communicator format phone #6	56	Duress code
25	Events reported to phone #6		Outputs
26	Reserved	57	Auxiliary output 14 partition selection
	Report settings	58	Auxiliary output 14 special timing
27	Reserved	59	Auxiliary output #1, event and time
28	Dialler abort delay	60	Auxiliary output #2, event and time
29	Listen in time	61	Auxiliary output #3, event and time
30	Download access code	62	Auxiliary output #4, event and time
31	Number of rings to answer		Autotest
32	Download control	63	Autotest timing
33	Download call back number	64	Autotest control
34	Partition 1, feature and report selections		Timer

Location	Description	Location	Description
65	Opening time	103	Autotest
66	Closing time/automatic arming time	104	Exit error
67	Days of the week each partition is open	105	Recent close
68	Days of the week for auto arming in partitions 1-8	106	Start program
Communicator codes		107	End program
69	Open	108	End download
70	Close	109-121	Reserved
71	Partial	Partition account codes	
72	Cancel	122	Account code partition 1
73	B alarm	123	Account code partition 2
74	Zone tamper	124	Account code partition 3
75	Zone tamper restore	125	Account code partition 4
76	Zone trouble	Communicator formats	
77	Zone trouble restore	126	Communicator format override
78	Box tamper	127	SIA code group 1
79	Box tamper restore	128	4/2 alarm code group 1
80	Siren tamper	129	4/2 restore group 1
81	Siren tamper restore	Zone types	
82	Sensor low battery	130	Group 1 zone type characteristics
83	Sensor low battery restore	131	SIA code group 2
84	Sensor missing	132	4/2 alarm code group 2
85	Sensor missing restore	133	4/2 restore group 2
86	Duress	134	Group 2 zone type characteristics
87	Keypad auxiliary 1	135	SIA code group 3
88	Keypad auxiliary 2	136	4/2 alarm code group 3
89	Keypad panic	137	4/2 restore group 3
90	Keypad tamper	138	Group 3 zone type characteristics
91	Mains fail	139	SIA code group 4
92	Mains restore	140	4/2 alarm code group 4
93	Low battery	141	4/2 restore group 4
94	Low battery restore	142	Group 4 zone type characteristics
95	Overcurrent	143	SIA code group 5
96	Overcurrent restore	144	4/2 alarm code group 5
97	Telephone line cut	145	4/2 restore group 5
98	Telephone line cut restore	146	Group 5 zone type characteristics
99	Expander trouble	147	SIA code group 6
100	Expander trouble restore	148	4/2 alarm code group 6
101	Fail to communicate	149	4/2 restore group 6
102	Log full	150	Group 6 zone type characteristics
		151	SIA code group 7

Location	Description	Location	Description
152	4/2 alarm code group 7	192	4/2 alarm code group 17
153	4/2 restore group 7	193	4/2 restore group 17
154	Group 7 zone type characteristics	194	Group 17 zone type characteristics
155	SIA code group 8	195	SIA code group 18
156	4/2 alarm code group 8	196	4/2 alarm code group 18
157	4/2 restore group 8	197	4/2 restore group 18
158	Group 8 zone type characteristics	198	Group 18 zone type characteristics
159	SIA code group 9	199	SIA code group 19
160	4/2 alarm code group 9	200	4/2 alarm code group 19
161	4/2 restore group 9	201	4/2 restore group 19
162	Group 9 zone type characteristics	202	Group 19 zone type characteristics
163	SIA code group 10	203	SIA code group 20
164	4/2 alarm code group 10	204	4/2 alarm code group 20
165	4/2 restore group 10	205	4/2 restore group 20
166	Group 10 zone type characteristics	206	Group 20 zone type characteristics
167	SIA code group 11	207	Serial port enable
168	4/2 alarm code group 11	208	Serial port baud rate
169	4/2 restore group 11	209	Home automation protocol
170	Group 11 zone type characteristics	210	Transition-based broadcasts
171	SIA code group 12	211	CS586 command/request enable
172	4/2 alarm code group 12	Zone and partition setup zones 49-168	
173	4/2 restore group 12	213	Zones 49-56 zone type
174	Group 12 zone type characteristics	214	Partition select, zones 49-56
175	SIA code group 13	215	Zones 57-64 zone type
176	4/2 alarm code group 13	216	Partition select, zones 57-64
177	4/2 restore group 13	217	Zones 65-72 zone type
178	Group 13 zone type characteristics	218	Partition select, zones 65-72
179	SIA code group 14	219	Zones 73-80 zone type
180	4/2 alarm code group 14	220	Partition select, zones 73-80
181	4/2 restore group 14	221	Zones 81-88 zone type
182	Group 14 zone type characteristics	222	Partition select, zones 81-88
183	SIA code group 15	223	Zones 89-96 zone type
184	4/2 alarm code group 15	224	Partition select, zones 89-96
185	4/2 restore group 15	225	Account code for partition 5
186	Group 15 zone type characteristics	226	Account code for partition 6
187	SIA code group 16	227	Account code for partition 7
188	4/2 alarm code group 16	228	Account code for partition 8
189	4/2 restore group 16	229	Zones 97-104 zone type
190	Group 16 zone type characteristics	230	Partition select, zones 97-104
191	SIA code group 17	231	Zones 105-112 zone type

Location	Description
232	Partition select, zones 105-112
233	Zones 113-120 zone type
234	Partition select, zones 113-120
235	Zones 121-128 zone type
236	Partition select, zones 121-128
237	Zones 129-136 zone type
238	Partition select, zones 129-136
239	Zones 137-144 zone type
240	Partition select, zones 137-144
241	Zones 145-152 zone type
242	Partition select, zones 145-152
243	Zones 153-160 zone type
244	Partition select, zones 153-160
245	Zones 161-168 zone type
246	Partition select, zones 161-168

Location 0 Country code (one segment, ND)

This location contains the country code which sets the specific country defaults. When this location is changed from the keypad, the panel returns to the default country settings.

Location 1 Phone prefix (four segments, ND)

This location contains the four-digit telephone prefix. This sequence is pre-dialed by each of the telephone numbers.

- 11 Programs a *.
- 12 Programs a #.
- 13 Programs a four-second delay at any point in the prefix.
- 14 Programs the end of the prefix.
- 15 Tone dialling is the default. If pulse dialling is desired, program '15' in the segment where pulse dialling should begin. If the entire number should be pulse dialling, program '15' in the first segment.



If no communicator formats are entered, the CSx75 acts as a local only control panel.



If '13' is programmed, the panel does not wait for a dial tone before starting to dial the number. Select this option when the phone system has a poor quality dial tone or does not generate a dial tone.

Location 2 Phone number 1 (16 segments, ND)

The CSx75 has six phone numbers that can be used to report events to multiple receivers or individuals. Each of these phone numbers has an event selector that can be used to select the events that are sent to each phone number. To report to a specific phone number, enter the telephone number, account code and format to be used. If any of this information is omitted, the CSx75 uses the data from phone number 1. For example, if all phone numbers use the same account code, it is only necessary to enter the account code in location 3. If a phone number is omitted, it is skipped in the reporting sequence.

Location 2 programs phone number 1. This contains the default data for all phone numbers. Program the phone number, account number and format for each of the other phone numbers only if you want to program them with different information.

If a telephone number is programmed (1 to 6) but no associated events are selected (in location 9, 13, 17 and so on), this number is automatically considered to be a backup number. The control panel makes two calls to each number in sequence. It performs the sequence for the number of times specified in location 26, segment 1 or until it receives a kiss off. By default, location 9, 13, 17, 21 and 25 are all off and location 5 is all on. If phone number 1 and phone number 2 are programmed, the default sequence is 1, 1, 2, 2, 1, 1, 2, 2 for a total of eight calls to each number.

- 11 Programs a *.
- 12 Programs a #.
- 13 Programs a four-second delay at any point in the phone number.
- 14 Programs the end of the phone number.

Location 3 Account code for phone #1 (six segments, ND)

This location contains the account code sent when phone number 1 is dialled. Each digit is stored in a different segment.

Program '10' in the segment immediately after the last digit of the account code. Any numbers after '10' are ignored. If the account code is six digits long, program all six segments.

Location 4 Communicator format for phone #1 (one segment, ND)

This location contains the communicator format used to transmit to the receiver connected to phone number 1. Consult the instructions for your central station receiver to determine which format is compatible. Select a format from the following table. To disable the dialer, do not program a communicator format for any phone numbers.

If you require a format other than those listed, review the override options described in location 126 to build the appropriate format. To create a special format, program '14' in location 4 in addition to the entries in location 126.

Data	Format Description
1	Contact ID
2	SIA
3	SIA with area modifiers
4	Voice dialler
5	Reserved
6	4+2 with 1400/1900 double round parity
7	4+2 with 1400/1900 checksum parity
8	4+2 with 2300/1800 double round parity
9	4+2 with 2300/1800 checksum parity
10	Fast Format 8 channel
11	Fast Format 16 channel
12	Siren Tone
13	Sema phone pager
14	Sema digit pager
15	Format overrides (build your own format)
16	Reserved
17	200 baud FSK (France only)
18	200 baud FSK Reversed (France only)
19	XSIA (Netherlands only)
20	XSIA with area modifier (Netherlands only)
21- 255	Reserved

 The voice dialer protocol does not generate an FTC (failure to communicate).

Location 5 Events reported to phone # 1 (two segments, FSD)

Segment 1 1 Alarms

2 Alarm restores

- 3 Opening and closings
- 4 Zone bypass and bypass restores
- 5 Zone trouble and trouble restores
- 6 Power fail, low battery, power restore and low battery restore
- 7 Bell cut, telephone line cut, bell cut restore, telephone line restore
- 8 Test reports

Segment 2

- 1 Start and end programming, download complete.
- 2 Zone and box tamper and tamper restore
- 3 Auxiliary power overcurrent, ground fault and restore for both
- 4 Wireless sensor missing and restore
- 5 Wireless sensor low battery and restore
- 6 Expander trouble and restore
- 7 Fail to communicate
- 8 Zone activity monitor

If Fast Format 8 channel is selected, the eight events in segment 1 represent the eight channels. If Fast Format 16 channel is selected, all 16 events in both segments represent the 16 channels.

Telephone line cut restore events are reported to the central station. The telephone line cut itself cannot be reported.

The information in the following locations is configured in the same way as locations 2, 3, 4 and 5, for phone 1. The following table contains the locations for phone numbers 2 to 6.

Description	Phone 2	Phone 3	Phone 4	Phone 5	Phone 6
Phone Number	6	10	14	18	22
Account Code	7	11	15	19	23
Communicator Format	8	12	16	20	24
Events	9	13	17	21	25

Location 26 Dial attempts for phone numbers (three segments, ND)

Segment 1 Dial attempts for ARC reporting Programs the number of dial attempts (1 to 15 attempts) that the communicator makes for ARC reporting. The factory default is 8.

Segment 2 Dial attempts before Fail to Communicate on ARC Programs the number of dial attempts that the communicator makes to a specific phone number before the Fail to Communicate condition is set.

Segment 3 Dial attempts for voice/pager/Siren Programs the number of dial attempts (1 to 15) that the communicator makes for voice dialling,

Tone dialling pager or Siren Tone formats. The factory default is 8.

Location 27 Reserved

Location 28 Dialler abort delay (one segment, ND)

This location contains the length of time before the duration of the dialler abort delay function. The delay can be from 0 to 255 seconds. 0 = no abort delay.

Location 29 Listen-in time (one segment, ND)

This location contains the duration of the listen-in timer. This can be from 0 to 255 seconds. 0= no listen-in time.

Location 30 Download access code (eight segments, ND)

This location contains the eight-digit access code the CSx75 must receive from the downloading software before the panel permits downloading to occur. The factory default code is 12780000.

Location 31 Number of rings to answer (one segment, ND)

This location contains the number of rings to answer for a download. Enter a number from 0 (disabled) to 15. The factory default is 8. This means the CSx75 answers on eight rings.

Location 32 Download control (one segment, FSD)

This contains the feature selections for controlling download sessions. The following features can be enabled or disabled using this option.

Segment 1

- 1 On: enables two-call answering machine defeat. It works by starting a 45-second timer after it sees a one or two-ring call. During this time it answers on the first ring.
- 2 Reserved
- 3 On: requires call back before download session.
- 4 Shutdown. This can only be viewed from the keypad and must be changed through downloading.
- 5 On: locks all local programming. This can only be viewed from the keypad and must be changed through downloading.
- 6 On: locks programming of all options associated with the communicator. This can only be viewed from the keypad and must be changed through downloading.
- 7 On: locks out download section. This can only be viewed from the keypad and must be changed through downloading.

If this is on, Locations 19 to 22 cannot be viewed from the keypad.
- 8 On: allows an autotest to be interrupted.

Location 33 Download call back number (16 segments, ND)

If a telephone number is programmed in this location and Require Call Back is enabled in location 32, the control panel hangs up for approximately 36 seconds to ensure that the calling party has disconnected and then calls back. See *Location 1* on page 61 for tone and pulse dialling instructions.

- 13 Programs a delay of four seconds at any point in the phone number. Put '13' in the appropriate delay location.
- 14 Programs the end of the phone number.



Always review the call back phone number for accuracy before disconnecting.

Location 34 Partition, feature and report selections (five segments, FSD)

This location is used to enable certain features that can be accessed or are visible to the user from the keypad. In addition, certain communicator reports are enabled in this location. See *Location 122* to *Location 125* on page 79 for more information.

This location contains five segments. See the Glossary for more information.

Segment 1	<ol style="list-style-type: none">1 On: enables quick arm.2 On: enables re-exit.3 On: enables automatic bypass.4 On: enables silent keypad panic. This overrides audible keypad panic (7 + 9 double press). See <i>Appendix 1</i> for more information.5 On: enables audible keypad panic, for example, sirens are activated.6 On: enables keypad aux. 1 (1 + 3 double press).7 On: enables keypad aux. 2 (4 + 6 double press).8 On: enables keypad multiple code attempt tamper. If enabled, the keypad logs a tamper and stops working after six incorrect code entries in a row.
Segment 2	<ol style="list-style-type: none">1 On: enables LED extinguish. All LEDs, except the Power LED, turn off after 60 seconds of inactivity. They turn on again with a key stroke.2 On: enables require code for bypassing.3 On: enables zone bypassed sounder alert.4 On: enables mains power/low battery sounder alert.5 On: enables bypass toggle.6 On: enables silent auto arm.

	7	Reserved
	8	On: enables silent exit always.
Segment 3	1	On: enables opening and closing reports.
	2	On: enables zone bypass reporting.
	3	On: enables zone restore reporting.
	4	On: enables zone trouble reporting.
	5	On: enables zone tamper reporting.
	6	On: enables cancel reporting.
	7	On: enables recent closing report.
	8	On: enables exit error report.
Segment 4	1	Reserved
	2	On: a wireless zone, which is lost, generates a tamper alarm during armed state and fault during disarmed state.
	3	On: enables restoral of events at disarming.
	4	On: allows arming with a wireless zone, which is lost.
	5-8	Reserved
Segments 5		Reserved

Location 35 Entry/exit times (six segments, ND)

This location is used to program the entry/exit times. There are two separate entry/exit times.

Segment 1	Entry time 1	This is the entry time that is used when a Delay 1 zone type initiates an entry delay. Valid entries are 10 to 255 seconds.
Segment 2	Exit time 1	This is the exit time that is used for all zones designated as Delay 1. Valid entries are 10 to 255 seconds.
k		
j		
Segment 3	Entry time 2	This is the entry time that is used when a Delay 2 zone type initiates an entry delay. Valid entries are 10 to 255 seconds.
l		
k		
h		
Segment 4	Exit time 2	This is the exit time that is used for all zones designated as Delay 2. Valid entries are 10 to 255 seconds.
k		
h		
k		
Segments 5 + 6	Reserved	

Location 36 Zone type, zones 1 to 8 (eight segments, ND)

Zones can be programmed to be one of twenty different zone types (configurations). Segment 1 corresponds to zone 1, segment 8 corresponds to zone 8.

The default zone types are listed below. These zone types can be customised by programming group characteristics in locations 130 to 206.

Data	Description of default zone types	Data	Description of default zone types
1	Burglary ("A" alarm)	11	Burglary ("B" alarm)
2	24-hour	12	Double knock ("B" alarm)
3	Double knock ("A" alarm)	13	Access ("B" alarm)
4	Access ("A" alarm)	14	Entry / Exit ("B" alarm)
5	Entry/Exit ("A" alarm)	15	Roller switch ("B" alarm)
6	Keypad	16	TBD
7	Fire	17	TBD
8	Personal attack	18	TBD
9	Tamper	19	TBD
10	Roller switch ("A" alarm)	20	TBD



Roller switch zones can be used on the CSx75 control panel only. They cannot be used on a CS216 hardware zone expander.

Location 37 Partition select, zones 1 to 8 (eight segments, FSD)

This location is used to select the partition(s) in which zones 1 to 8 reside. A zone may reside in any combination of the **eight** partitions.



If a burglary zone resides in more than one partition, it is active only when all partitions in which it resides are armed. A zone that resides in more than one partition is reported to its lowest partition number.

Location 37 has eight segments. Segment 1 corresponds to zone 1 and segment 8 corresponds to zone 8.

Segment 1- 8	1	Partition #1
	2	Partition #2
	3	Partition #3
	4	Partition #4
	5	Partition #5
	6	Partition #6
	7	Partition #7

Location 38 Zone type, zones 9 to 16 (eight segments, ND)

This location contains the zone type for zones 9 to 16. Segment 1 corresponds to zone 9 and segment 8 corresponds to zone 16. See *Location 36* on page 67 for more information.

Location 39 Partition select, zones 9 to 16 (eight segments, FSD)

This location is used to select the partition(s) in which zones 9 to 16 reside. A zone may reside in any combination of the **eight** partitions. See *Location 37* on page 67 for more information.

Location 40 Zone type, zones 17 to 24 (eight segments, ND)

This location contains the zone type for zones 17 to 24. Segment 1 corresponds to zone 17 and segment 8 corresponds to zone 24. See *Location 36* on page 67 for more information.

Location 41 Partition select, zones 17 to 24 (eight segments, FSD)

This location is used to select the partition(s) in which zones 17 to 24 reside. A zone may reside in any combination of the **eight** partitions. See *Location 37* on page 67 for more information.

Location 42 Zone type, zones 25 to 32 (eight segments, ND)

This location contains the zone type for zones 25 to 32. Segment 1 corresponds to zone 25 and segment 8 corresponds to zone 32. See *Location 36* on page 67 for more information.

Location 43 Partition select, zones 25 to 32 (eight segments, FSD)

This location is used to select the partition(s) in which zones 25 to 32 reside. A zone may reside in any combination of the **eight** partitions. See *Location 37* on page 67 for more information.

Location 44 Zone type, zones 33 to 40 (eight segments, ND)

This location contains the zone type for zones 33 to 40. Segment 1 corresponds to zone 33 and segment 8 corresponds to zone 40. See *Location 36* on page 67 for more information.

Location 45 Partition select, zones 33 to 40 (eight segments, FSD)

This location is used to select the partition(s) in which zones 33 to 40 reside. A zone may reside in any combination of the **eight** partitions. See *Location 37* on page 67 for more information.

Location 46 Zone types, zones 41 to 48 (eight segments, ND)

This location contains the zone type for zones 41 to 48. Segment 1 corresponds to zone 41 and segment 8 corresponds to zone 48. See *Location 36* on page 67 for more information.

Location 47 Partition select, zones 41 to 48 (eight segments, FSD)

This location is used to select the partition(s) in which zones 41 to 48 reside. A zone may reside in any combination of the **eight** partitions. See *Location 37* on page 67 for more information.

Location 48 Swinger shutdown count

This location contains the number of trips that can occur on a zone before that zone is automatically bypassed.

Location 49 Keypad sounder control (one segment, FSD)**Segment 1**

- 1 On: the keypad sounds for a telephone line cut when the system is armed.
- 2 On: the keypad sounds for telephone line cut when disarmed.
- 3 On: the keypad sounds upon mains power failure.
- 4 On: the keypad sounds when a low battery is detected.
- 5 On: the keypad sounds during "B" Alarm trip time.
- 6 On: the keypad sounds for zone and box tampers.
- 7 Reserved
- 8 On: the keypad sounds for expander trouble.

Location 50 Internal siren options (three segments, FSD)

This location is used to enable siren options. There are three segments in this location.

Segment 1

- 1 On: the siren sounds for a telephone line cut when the system is armed.
- 2 On: the siren sounds for a telephone line cut when the system is disarmed.
- 3 On: the siren blasts at arming.
- 4 On: the siren blasts at exit expiration.
- 5 On: the siren blasts at closing kissoff.
- 6 On: the siren sounds for expander trouble.
- 7 On: the siren sounds for a zone or box tamper.
- 8 On: the siren blasts once at keyswitch or wireless arming; twice at disarming.

Segment 2

- 1 On: the siren driver is a voltage output. Off: an on-board siren driver is enabled.
- 2-8 Reserved

Segment 3

- 1-8 Reserved

Location 51 System options (five segments, FSD)

This location is used to enable various system feature and reporting options.

Segment 1	1	On: zone restores are delayed until siren timeout.
	2	On: enables battery presence test (every 10 seconds).
	3	On: dynamic battery test is performed at arming.
	4	On: enables manual bell test.
	5	On: enables manual communicator test.
	6	On: enables box tamper input.
	7	On: clock uses internal crystal.
	8	On: disable temporal siren on fire.
Segment 2	1	On: disables on-board 8 zones.
	2	On: forces default configuration for zone types to be used.
	3	On: disables report bypass on force arm.
	4	On: enables resetting of tamper memory by a master code
	5	On: enables 2-wire smoke detectors to be used.
	6	On: sets for 25 VA transformer.
	7	On: enables first to open / last to close.
	8	On: enables summer / winter time option.
Segment 3	1	On: enables box tamper report.
	2	On: enables mains fail report.
	3	On: enables low battery report.
	4	On: enables aux. power overcurrent report.
	5	On: enables siren supervision report.
	6	On: enables telephone line cut report.
	7	Reserved
	8	On: enables expander trouble reporting.
Segment 4	1	On: enables fail to communicate report.
	2	On: enables log full report.
	3	On: enables autotest report.
	4	On: enables start/end programming report.

- 5 On: enables end download report.
- 6 On: enables sensor low battery report.
- 7 On: enables sensor missing report.
- 8 On: enables automatic test reporting only when system is armed.

Segment 5

- 1 On: enables lost clock service LED.
- 2 On: enables all abort.
- 3-8 Reserved

Location 52 System timers (14 segments, ND)

This location contains the duration of various system timing functions.

- Segment 1** Dynamic battery test duration. 0 to 255 minutes. 0 = no test.
- Segment 2** Mains fail report delay. 0 to 255 minutes.
- Segment 3** Power up delay. 0 to 60 seconds. 0 = no power up delay.
- Segment 4** Internal Siren time. 1 to 255 minutes.
- Segment 5** Telephone line cut delay. 0 to 255 seconds. 0= no telephone line monitoring.
- Segment 6** B-Alarm timer
- Segment 7** Chime time in 50 msec. (1/20th second) increments from 0-12 seconds. 0 = follows zone.
- Segment 8** Fire alarm verification time. 120 to 255 seconds. 0 = no fire alarm verification.
- Segment 9** Zone activity monitor. 0 to 255 days. 0= disabled.
- Segment 10** Double Knock Time. Min, ½ min resolution.
- Segment 11** Double Knock Open Time. 10 to 255 seconds.
- Segments 12** External siren time. 1 to 255 minutes.
- Segments 13-14** Reserved

Location 53 Special features (one segment, FSD)

- Segment 1** 1 On: enables the six-digit code location. If the six-digit location is enabled, all arm/disarm codes and the Go to program code are six digits. If this option is enabled, the default user 1 code is 112256.
If you enable this location, verify that the Go to program code is a six-digit code before exiting programming.
- 2 On: requires code entry for *98 (perform call back download) and *99 (answer incoming call for download) functions.

and *99 (answer incoming call for download) functions.

- 3** Reserved
- 4** Enable walk-test mode
- 5-8** Reserved

Location 54 Go to program code (six segments, ND)

This location contains the Go to program code, which is either a four-digit or six-digit code. If the six-digit code option is enabled in location 53, this code must contain six digits. If the option is not enabled, the last two segments (digits) are ignored. When the CSx75 is disarmed, the Go to program code can be used to enter programming mode.

Location 55 Go to program code partition and authorization (two segments, feature selection)

The Go to program code can be used as a standard arm/disarm code. When using the code to arm or disarm, the user ID is 255. This code may not be changed in run mode.

Segment 1	1	Reserved
	2	On: enables the Go to program code as an arm only code.
	3	On: enables the Go to program code as an arm only after closing code.
	4	On: enables the Go to program code as a master arm/disarm code that can change user codes.
	5	On: enables the Go to program code as an arm/disarm code.
	6	On: enables the Go to program code to bypass zones.
	7	On: enables the Go to program code to send opening and closing reports.
	8	Reserved
Segment 2	1	On: enables the Go to program code for partition 1.
	2	On: enables the Go to program code for partition 2.
	3	On: enables the Go to program code for partition 3.
	4	On: enables the Go to program code for partition 4.
	5	On: enables the Go to program code for partition 5.
	6	On: enables the Go to program code for partition 6.
	7	On: enables the Go to program code for partition 7.
	8	On: enables the Go to program code for partition 8.

Location 56 Duress code (six segments, ND)

This location contains the duress code. It has either four or six digits. If the six digit code option is enabled in location 53, this code must contain six digits. If the six-digit option is not enabled in location 53, the last two digits are ignored. If the duress code is programmed, it works for all partitions.

Location 57 Auxiliary output 1 to 4 partition selection (four segments, FSD)

This location is used to select the partition(s) in which events must occur before the output activates. This location has four segments. Segment 1 corresponds to output 1 and segment 4 corresponds to output 4.

Segment 1 (Aux 1)	Segment 2 (Aux 2)	Segment 3 (Aux 3)	Segment 4 (Aux 4)
1= Partition #1	1= Partition #1	1= Partition #1	1= Partition #1
2= Partition #2	2= Partition #2	2= Partition #2	2= Partition #2
3= Partition #3	3= Partition #3	3= Partition #3	3= Partition #3
4= Partition #4	4= Partition #4	4= Partition #4	4= Partition #4
5= Partition #5	5= Partition #5	5= Partition #5	5= Partition #5
6= Partition #6	6= Partition #6	5= Partition #6	5= Partition #6
7= Partition #7	7= Partition #7	7= Partition #7	7= Partition #7
8= Partition #8	8= Partition #8	8= Partition #8	8= Partition #8

Location 58 Auxiliary output 1 to 4 special timing (four segments, FSD)

This location contains the special timing feature activation for the four auxiliary outputs. Segment 1 corresponds to output 1 and segment 4 corresponds to output 4.

Segment 1-4

- 1** On: output is timed in minutes; Off: output is timed in seconds.
- 2** On: output latches; Off: output is timed.
- 3** On: output stops timing upon code entry; Off: output continues to time upon code entry.
- 4** On: output activates only between the closing and opening time in locations 65 and 66.
- 5** On: output activates only between the opening and closing time in locations 65 and 66.
- 6** On: output is inverted (0 volts going to 12 volts when activated).
- 7-8** Reserved

Location 59 Auxiliary output #1, event and time (two segments, ND)

Segment 1 Use the table below to select the event that activates auxiliary output 1.

Segment 2 Program the timing from 0 to 255 (minutes or seconds, depending on data programmed in segment 1, location 58). Program a 0 to make the output follow the event.

Data	Event	Data	Event
0 ✓	Alarms Burglary alarm	21	Armed/Disarmed Armed state

Data	Event	Data	Event
1 ✓	Fire alarm	22	Disarmed state
2 ✓	24-hour alarm	23	Ready
3 ✓	Trouble alarm	24	Not ready
4 ✓	Tamper alarm	53	14.1.1.1.1.1 Armed away
46 ✓	Any alarm	54	Armed stay
	Sirens		Fire
5	Yelping siren (burglary)	25	Fire
6	Temporal siren (fire)	26	Fire trouble
7	Any siren		Expander
	Bypass	28 ✓	Expander trouble
8	Any bypass		Open/Closed
	Power	30	Open period
9	Mains fail	31	Closed period
10	Low battery		Communications
29	Dynamic battery test time	32	Listen-in
	Codes	33	Line seizure
11 ✓	Duress	34	Ground start
48 ✓	Code entry (See note 1 below)	35	Fail to communicate
	Keypad	36	Telephone line fault
13 ✓	Aux 2 keypad zone	38	Download in process
14 ✓	Panic keypad zone	55	Aux. Com. channel fail
15	Keypad tamper		Program mode
47	Beeping keypad	37	Program mode
56	Audible panic		Tampers and faults
57	Silent panic	39	Fire alarm reset (See note 2 below)
	Autotest	40	Short circuit (Over-current)
16 ✓	Autotest	41	Box tamper
52	Manual test	42	Siren tamper
	Alarm memory	43	Any open
17	Alarm memory	44	Any short
	Entry/exit	45	Any fault (open/ short on non-fire zone)
18	Entry		Keyfobs
19	Exit	49 ✷ ✓	Keyfob Function 1
20	Entry or Exit	50 ✷ ✓	Keyfob Function 2
			Reserved
		51	Reserved

❖ Events 49 and 50 require RX8w8, RX16w8, RX8i4 or RX16i4 wireless receivers to operate.

✓ If set to the follow condition, these events are 1 second.

 1

When Event 48 is programmed, it is possible to program a user code's authorization to select which output(s) a particular code activates. See Assigning authority level on page 43 for more information.

 2

Always program Event 39, Fire alarm reset, to follow the event.

Location 60 Auxiliary output #2, event and time (two segments, ND)

Segment 1 Use the table in location 59 to select the event that activates auxiliary output 2..

Segment 2 Program the timing from 0 to 255 (minutes or seconds, depending on data programmed in segment 2, location 58). Program '0' to make the output follow the event.

Location 61 Auxiliary output #3, event and time (two segments, ND)

Segment 1 Use the table in location 59 to select the event that activates auxiliary output 3.

Segment 2 Program the timing from 0 to 255 (minutes or seconds, depending on data programmed in segment 3, location 58). Program '0' to make the output follow the event.

Location 62 Auxiliary output #4, event and time (two segments, ND)

Segment 1 Use the table in location 59 to select the event that activates auxiliary output 4.

Segment 2 Program the timing from 0 to 255 (minutes or seconds, depending on data programmed in segment 4, location 58). Program '0' to make the output follow the event.

Location 63 Autotest timing (three segments, ND)

Segment 1 Program the autotest interval from 1 to 255 hours/days.

Segment 2 Program the autotest report hour in 24-hour format. If the interval is in hours, this segment is ignored.

Segment 3 Program the autotest report time. This is the number of minutes after the hour.

Segment 4 Reserved

Location 64 Autotest control (one segment, FSD)

Segment 1 Program '1' if the interval is in hours; Program '0' if it is in days. Add '2' to suppress the daily test or '3' to suppress the hourly test if any report has been sent.

Location 65 Opening time (two segments, ND)

This location contains the time, in 24-hour format, that the CSx75 enables codes designated as arm only after closing. This time is valid only on those days programmed in location 67.



Opening time must be earlier than closing time for auto arm, aux. outputs, or code authorization to function properly.

Segment 1 Program the hour of the opening time.

Segment 2 Program the minutes after the hour of the opening time.

Location 66 Closing time/automatic arming time (two segments, ND)

This location contains the time, in 24-hour format, that the CSx75 disables the disarm capability for codes designated as arm only after closing. This is also the time the automatic arming sequence begins if enabled in location 68.

Segment 1 Programs the hour of the closing/auto arm time.

Segment 2 Programs the minutes after the hour of the closing/auto arm time.

Location 67 Days of the week each partition is open (eight segments, FSD)

This location selects the days of the week that each partition is open. On these days, arm only after close window codes can arm and disarm during an open window.

If any partition is not programmed to be opened and is programmed to auto-arm, the CSx75 tries to arm every 45 minutes for the duration of the closed period unless auto retry is disabled in location 68.

On days not selected here, arm only after close window codes do not disarm. Segment 1 corresponds to partition 1 and **segment 8** corresponds to **partition 8**. See *Location 65* and *Location 66* on page 76 for the opening and closing times for open days.

Segment 1-8	1	Open on Sunday
	2	Open on Monday
	3	Open on Tuesday
	4	Open on Wednesday
	5	Open on Thursday
	6	Open on Friday
	7	Open on Saturday
	8	Reserved

Location 68 Days of the week for auto arming in partitions 1 to 8 (eight segments, FSD)

This location selects which days each partition auto arms. Segment 1 corresponds to partition 1 and **segment 8** corresponds to **partition 8**. If a zone is faulted when the panel tries to auto arm, the zone is bypassed.

Segment 1-8	1	Auto arming on Sunday
--------------------	----------	-----------------------

- 2** Auto arming on Monday
- 3** Auto arming on Tuesday
- 4** Auto arming on Wednesday
- 5** Auto arming on Thursday
- 6** Auto arming on Friday
- 7** Auto arming on Saturday
- 8** Disable 45-minute retry timer

Communicator codes with three segments contain the following segments.

- Segment 1** Report code 10's digit.
- Segment 2** Report code 1's digit / Fast Format 8 channel number.
- Segment 3** Voice channel reported for this event.

Communicator codes with two segments contain the following segments.

- Segment 1** Report code 10's digit.
- Segment 2** Report code 1's digit / Fast Format 8 channel number.



Locations 69 to 121 are used only when reporting events to a pager or using a slow format such as 4+2. When using Contact ID or SIA, there is no need to program these locations.

The communicator codes for activation have three segments, as described in location 69. The communicator codes for restores have two segments.

Communicator Code	Location	Number of Segments
Open	69	3
Close	70	3
Partial	71	3
Cancel	72	3
“B” Alarm	73	3
Zone tamper	74	3
Zone tamper restore	75	2
Zone trouble	76	3
Zone trouble restore	77	2
Box trouble	78	3

Communicator Code	Location	Number of Segments
Box trouble restore	79	2
Siren tamper	80	3
Siren tamper restore	81	2
Sensor low battery	82	3
Sensor low battery restore	83	2
Sensor missing	84	3
Sensor missing restore	85	2
Duress	86	3
Keypad Auxiliary 1	87	3
Keypad Auxiliary 2	88	3
Keypad Panic	89	3
Keypad tamper	90	3
Mains fail	91	3
Mains restore	92	2
Low battery	93	3
Low battery restore	94	2
Over current	95	3
Over current restore	96	2
Telephone line cut	97	3
Telephone line cut restore	98	2
Expander trouble	99	3
Expander trouble restore	100	2
Fail to communicate	101	3
Log full	102	3
Autotest	103	3
Exit error	104	3
Recent close	105	3
Start program	106	3
End program	107	3

Communicator Code	Location	Number of Segments
End download	108	3

Locations 109 to 121

Reserved

Location 122 Account code for partition 1 (six segments, ND)

This location contains the account code sent when partition 1 is reported.

If this location is left unprogrammed (all 10s) the account code corresponding to the phone number dialed is used.

If the account code is less than six digits, program '10' in the segment immediately after the last digit of the account code. If the account code is six digits long, program all six segments.

Location 123 Account code for partition 2 (six segments, ND)

Location 124 Account code for partition 3 (six segments, ND)

Location 125 Account code for partition 4 (six segments, ND)

Location 126 Communicator format override

Segment 1	1	On: 1800 Hz transmit; Off: 1900 Hz transmit.
	2	On: 2300 Hz handshake; Off: 1400 Hz handshake.
	3	On: checksum parity; Off: double round parity.
	4	On: SIA area modifier.
	5	Allow phone number programming.
	6	Sema digit.
	7	On: 20 p.p.s.; Off 10 p.p.s.
	8	On: handshake required.
Segment 2	1	On: pager format.
	2	On: 1400/2300 handshake.
	3	On: Fast Format 8 channel.
	4	On: voice protocol.
	5	On: Contact ID.
	6	On: SIA.
	7	On: Contact ID or 4+2 .

8 On: DTMF.

Location 127 SIA code group 1 (one segment, ND)

This location contains the event code sent for a Group 1 SIA or Contact ID report. See Appendix 2 for a list of event codes. The zone ID refers to the zone in alarm.

Location 128 4/2 alarm code group 1 (three segments, ND)

This location contains the event code sent for a 4+2 report for Group 1. The zone ID refers to the zone in alarm.

Segment 1 Report code 10's digit.

Segment 2 Report code 1's digit/Fast Format 8 channel number.

Segment 3 Voice channel reported for this event.

Location 129 4/2 restore group 1 (two segments, ND)

This location contains the restore code sent for a 4+2 report for Group 1. The zone ID refers to the zone in alarm.

Segment 1 Report code 10's digit.

Segment 2 Report code 1's digit/Fast Format 8 channel number.

Location 130 Group 1 zone type characteristics (five segments, FSD)

This is a default zone type and should be changed only if you are certain about what you are doing.

Segment 1	1	Fire (turn on for a fire zone).
	2	24-hour (turn on for a non-fire 24-hour zone).
	3	Keypad zone (normally open switch).
	4	Follower/Access zone (turn on for a burglary zone that is instant during non-entry times).
	5	Delay 1 zone (follows timer 1 entry and exit times).
	6	Delay 2 zone (follows timer 2 entry and exit times).
	7	Interior (turn on if the zone should automatically bypass or bypass for stay arming).
	8	Local only (turn on if the zone should not be reported).

Segment 2	1	On: the zone type beeps the keypad for alarm.
	2	On: the zone type sounds the yelping siren for alarm.
	3	On: the zone type sounds the temporal siren for alarm.
	4	On: the zone type chimes.
	5	On: the zone type can be bypassed.

6 On: the zone type is included in the group shunt.

7 On: the zone type is force armable.

8 On: the zone type is entry guard.

Segment 3

1 On: enables fast loop response (50 msec). Off= 500 msec.

2 On: enables double end of line tamper zone. This is generally used for tampers on wireless zones.

3 On: enables trouble reporting zone. (Day zone and Fire zones)

4 Reserved

5 On: enables dialer delay zone. See *Location 28* on page 64 for more information.

6 On: zone type allows swinger shutdown. See *Location 48* on page 69 for more information.

7 On: enables restore reporting.

8 On: enables listen-in. See *Location 29* on page 64 for more information.

Segment 4

1 On: enables zone activity monitor. See *Location 52* on page 71 for more information.

2 "B" alarm zone

3 Final set door

4 Roller shutter zone

5 Double knock

6-8 Reserved

Segment 5 Reserved

 Both maintained and pulsed keyswitches can be configured. By default, a keyswitch is maintained. Change segment 3, bit 7 (enable restore reporting) for a pulsed keyswitch.

The information in the following locations is configured in the same way as locations 127, 128, 129 and 130 for zone type 1. The following table contains the locations for phone number zone groups 1 to 20.

Description	1	2	3	4	5	6	7	8	9	10
SIA	127	131	135	139	143	147	151	155	159	163
4/2 alarm	128	132	136	140	144	148	152	156	160	164
4/2 restore	129	133	137	141	145	149	153	157	161	165
Characteristics	130	134	138	142	146	150	154	158	162	166

Description	11	12	13	14	15	16	17	18	19	20
SIA	167	171	175	179	183	187	191	195	199	203
4/2 alarm	168	172	176	180	184	188	192	196	200	204

Description	1	2	3	4	5	6	7	8	9	10
4/2 restore	169	173	177	181	185	189	193	197	201	205
Characteristics	170	174	178	182	186	190	194	198	202	206

Location 207 Serial port enable (one segment, FSD)

This location turns the serial port on and off.

Segment 1	0	Serial STU
	1	Home automation protocol enabled (CS586)
	2	Serial printer

Location 208 Serial port baud rate (one segment, FSD)

This location sets the serial port baud rate.

Segment 1	0	2400 (2.4K)
	1	4800 (4.8K)
	2	9600 (9.6k)
	3	19200 (19.2K)
	4	38400 (38.4K)
	5-7	Reserved

Location 209 Home automation protocol (one segment, FSD)

This location sets the home automation protocol.

Segment 1	Binary =	-----
	ASCII =	1----

Location 210 Transition based broadcasts (two segments, FSD)

Segment 1	1	Reserved
	2	Interface configuration
	3-4	Reserved
	5	Zone status
	6	Zone snapshot
	7	Partition status
	8	Partitions snapshot message
Segment 2	1	System status message
	2	X-10 message received

- 3 Log event message
- 4 Keypad message received
- 5-8 Reserved

Location 211 CS586 command/request enable (four segments, FSD)

Segment 1	1	Reserved
	2	Interface configuration request
	3	Reserved
	4	Zone name request
	5	Zone status request
	6	Zone snapshot request
	7	Partition status request
	8	Partitions snapshot request
Segment 2	1	System status request
	2	X-10 message message
	3	Log event request
	4	Send keypad text message
	5	Keypad terminal mode request
	6-8	Reserved
Segment 3	1	Program data request
	2	Program data command
	3	User info request with PIN
	4	User info request without PIN
	5	Set user code command with PIN
	6	Set user code command without PIN
	7	Set user authoriz comm with PIN
	8	Set user authoriz comm without PIN
Segment 4	1-2	Reserved
	3	Store communication event command
	4	Set clock/calendar command
	5	Primary keypad function with PIN

- 6 Primary keypad function without PIN
- 7 Secondary keypad function
- 8 Zone bypass toggle

Location 212 LCD keypad address for CS586 (one segments, ND)

See *Appendix 3* for a list of keypad module numbers.

Location 213 Zone type, zones 49 to 56 (eight segments, ND)

This location contains the zone type for zones 49 to 56. Segment 1 corresponds to zone 49 and segment 8 corresponds to zone 56. See *Location 36* on page 67 for more information.

Location 214 Partition select, zones 49 to 56 (eight segments, FSD)

This location is used to select the partition(s) in which zones 49 to 56 reside. A zone may reside in any combination of the eight partitions. See *Location 37* on page 67 for more information.

Location 215 Zone type, zones 57 to 64 (eight segments, ND)

This location contains the zone type for zones 57 to 64. Segment 1 corresponds to zone 57 and segment 8 corresponds to zone 64. See *Location 36* on page 67 for more information.

Location 216 Partition select, zones 57 to 64 (eight segments, FSD)

This location is used to select the partition(s) in which zones 57 to 64 reside. A zone may reside in any combination of the eight partitions. See *Location 37* on page 67 for more information.

Location 217 Zone type, zones 65 to 72 (eight segments, ND)

This location contains the zone type for zones 65 to 72. Segment 1 corresponds to zone 65 and segment 8 corresponds to zone 72. See *Location 36* on page 67 for more information.

Location 218 Partition select, zones 65 to 72 (eight segments, FSD)

This location is used to select the partition(s) in which zones 65 to 72 reside. A zone may reside in any combination of the eight partitions. See *Location 37* on page 67 for more information.

Location 219 Zone type, zones 73 to 80 (eight segments, ND)

This location contains the zone type for zones 73 to 80. Segment 1 corresponds to zone 73 and segment 8 corresponds to zone 80. See *Location 36* on page 67 for more information.

Location 220 Partition select, zones 73 to 80 (eight segments, FSD)

This location is used to select the partition(s) in which zones 73 to 80 reside. A zone may reside in any combination of the eight partitions. See *Location 37* on page 67 for more information.

Location 221 Zone type, zones 81 to 88 (eight segments, ND)

This location contains the zone type for zones 81 to 88. Segment 1 corresponds to zone 81 and segment 8 corresponds to zone 88. See *Location 36* on page 67 for more information.

Location 222 Partition select, zones 81 to 88 (eight segments, FSD)

This location is used to select the partition(s) in which zones 81 to 88 reside. A zone may reside in any combination of the eight partitions. See *Location 37* on page 67 for more information.

Location 223 Zone type, zones 89 to 96 (eight segments, ND)

This location contains the zone type for zones 89 to 96. Segment 1 corresponds to zone 89 and segment 8 corresponds to zone 96. See *Location 36* on page 67 for more information.

Location 224 Partition select, zones 89 to 96 (eight segments, FSD)

This location is used to select the partition(s) in which zones 89 to 96 reside. A zone may reside in any combination of the eight partitions. See *Location 37* on page 67 for more information.

Location 225 Account code for partition 5 (eight segments, ND)

This location contains the account code sent when partition 1 is reported.

If this location is left unprogrammed (all 10s), the account code that corresponds to the phone number dialed is used.

If the account code is less than six digits, program '10' in the segment immediately after the last digit of the account code. If the account code is six digits long, program all six segments.

Location 226 Account code for partition 6 (six segments, ND)**Location 227 Account code for partition 7 (six segments, ND)****Location 228 Account code for partition 8 (six segments, ND)****Location 229 Zone type, zones 97 to 104 (eight segments, ND)**

This location contains the zone type for zones 97 to 104. Segment 1 corresponds to zone 97 and segment 8 corresponds to zone 104. See *Location 36* on page 67 for more information.

Location 230 Partition select, zones 97 to 104 (eight segments, FSD)

This location is used to select the partition(s) in which zones 97 to 104 reside. A zone may reside in any combination of the eight partitions. See *Location 37* on page 67 for more information.

Location 231 Zone type, zones 105 to 112 (eight segments, ND)

This location contains the zone type for zones 105 to 112. Segment 1 corresponds to zone 105 and segment 8 corresponds to zone 112. See *Location 36* on page 67 for more information.

Location 232 Partition select, zones 105 to 112 (eight segments, FSD)

This location is used to select the partition(s) in which zones 105 to 112 reside. A zone may reside in any combination of the eight partitions. See *Location 37* on page 67 for more information.

Location 233 Zone type, zones 113 to 120 (eight segments, ND)

This location contains the zone type for zones 113 to 120. Segment 1 corresponds to zone 113 and segment 8 corresponds to zone 120. See *Location 36* on page 67 for more information.

Location 234 Partition select, zones 113 to 120 (eight segments, FSD)

This location is used to select the partition(s) in which zones 113 to 120 reside. A zone may reside in any combination of the eight partitions. See *Location 37* on page 67 for more information.

Location 235 Zone type, zones 121 to 128 (eight segments, ND)

This location contains the zone type for zones 121 to 128. Segment 1 corresponds to zone 121 and segment 8 corresponds to zone 128. See *Location 36* on page 67 for more information.

Location 236 Partition select, zones 121 to 128 (eight segments, FSD)

This location is used to select the partition(s) in which zones 121 to 128 reside. A zone may reside in any combination of the eight partitions. See *Location 37* on page 67 for more information.

Location 237 Zone type, zones 129 to 136 (eight segments, ND)

This location contains the zone type for zones 129 to 136. Segment 1 corresponds to zone 129 and segment 8 corresponds to zone 136. See *Location 36* on page 67 for more information.

Location 238 Partition select, zones 129 to 136 (eight segments, FSD)

This location is used to select the partition(s) in which zones 129 to 136 reside. A zone may reside in any combination of the eight partitions. See *Location 37* on page 67 for more information.

Location 239 Zone type, zones 137 to 144 (eight segments, ND)

This location contains the zone type for zones 137 to 144. Segment 1 corresponds to zone 137 and segment 8 corresponds to zone 144. See *Location 36* on page 67 for more information.

Location 240 Partition select, zones 137 to 144 (eight segments, FSD)

This location is used to select the partition(s) in which zones 137 to 144 reside. A zone may reside in any combination of the eight partitions. See *Location 37* on page 67 for more information.

Location 241 Zone type, zones 145 to 152 (eight segments, ND)

This location contains the zone type for zones 145 to 152. Segment 1 corresponds to zone 145 and segment 8 corresponds to zone 152. See *Location 36* on page 67 for more information.

Location 242 Partition select, zones 145 to 152 (eight segments, FSD)

This location is used to select the partition(s) in which zones 145 to 152 reside. A zone may reside in any combination of the eight partitions. See *Location 36* on page 67 for more information.

Location 243 Zone type, zones 153 to 160 (eight segments, ND)

This location contains the zone type for zones 153 to 160. Segment 1 corresponds to zone 153 and segment 8 corresponds to zone 160. See *Location 36* on page 67 for more information.

Location 244 Partition select, zones 153 to 160 (eight segments, FSD)

This location is used to select the partition(s) in which zones 153 to 160 reside. A zone may reside in any combination of the eight partitions. See *Location 36* on page 67 for more information.

Location 245 Zone type, zones 161 to 168 (eight segments, ND)

This location contains the zone type for zones 161 to 168. Segment 1 corresponds to zone 161 and segment 8 corresponds to zone 168. See *Location 36* on page 67 for more information.

Location 246 Partition select, zones 161 to 168 (eight segments, FSD)

This location is used to select the partition(s) in which zones 161 to 168 reside. A zone may reside in any combination of the eight partitions. See *Location 36* on page 67 for more information.

15 USING PARTITIONED SYSTEMS

Your system can be divided up so that it works in different ways in different areas. These areas are known as partitions.

If your system is multi-partitioned and the keypad is placed in one partition, your keypad provides the status of the zones in that partition by using the display messages described in *Displays in the partitioning master mode* on page 88.

The master mode of operation allows you to temporarily access any partition within the system, providing your code is authorized, and to perform functions in other partitions. Read this entire manual to help you understand the different display messages that may be displayed on your keypad.



*Press *1 to temporarily access the master mode. The keypad reverts back to its assigned partition 60 seconds after a keypress, or 10 seconds without a keypress. Press # to exit this mode.*

15.1 LEDs in partitioning master mode

Ready	On if all partitions are ready.
	Flashes if all areas are ready or can be force armed.
Fire	On if any area has a fire condition.
	Flashes if any area has a fire trouble condition.
Power	On if the primary power is connected to the CSx75 control panel.
	Flashes if the system has a low standby battery condition.

15.2 Displays in the partitioning master mode

15.2.1 Armed and Ready status

The LCD display shows the armed and ready status of all **eight** partitions, if any or all of the areas is armed or not ready.

1. All **eight** areas are ready and area **8** is disarmed. If a number is flashing on the Ready line, that area is ready to be Force Armed.
2. All areas are disarmed and ready to arm.

Ready	12345678
Armed	1234567-
System Ready	
Type code to arm	

15.2.2 Arming and disarming multiple partitions

1. To arm/disarm multiple partitions, enter a code that has arm/disarm authority for all partitions.



User code

2. The numbers on the top line represent the disarmed areas the code can access. The numbers on the bottom line represent the areas that are armed. Refer to the following table for possible conditions.

12- 4 5678	Disarm	→
-- 3- 5678	Arm	→

LCD display for area Top line over bottom line	Condition
Blank	Area not used or authorized
Blank	
Dash (-)	Area not ready
Dash (-)	
Flashing Area #	Area ready to force arm
Dash (-)	
Area #	Area disarmed & ready to arm
Dash (-)	
Area #	Area is armed
3. To disarm all of these areas, press the ↑ key.	→ ↑
4. To arm all of these areas, press the ↓ key.	→ ↓

To toggle a single area between the armed and disarmed conditions, press ***Area number**.

For example, if area 4 is armed, press ***4** to disarm this area..If area 4 is disarmed, press ***4** to arm it. To control the individual areas, refer to the following section.

→ * area number

15.2.3 Operating individual areas in the multi-partition mode

1. Enter a valid arm/disarm code for the area you want to operate.

→ User code

2. The areas authorized by this code are displayed.

12-45678	Disarm	→
----------	--------	---

--3- 5678	Arm	→
-----------	-----	---

3. To toggle between the armed and disarmed states of an individual area, press ***** followed by the area number.

→ * Area number

4. To operate an individual area, enter the number of the partition you want to operate. The LCD keypad now operates as a single-area keypad.

→ * Area number

All keys and functions entered affect this individual partition only. The LEDs and display represent the status of that partition only. The word *system* is replaced with *area #*. This feature must be configured by the installer and is available only if the keypad is not the master keypad.

5. Area 4 is selected and area 4 is ready to arm.

Area 4 Ready

Type code to arm

6. To exit the individual partition mode, press **##**.



##

7. To exit this display, press **#**.



#

15.2.4 Silencing alarms in the multi-partition mode

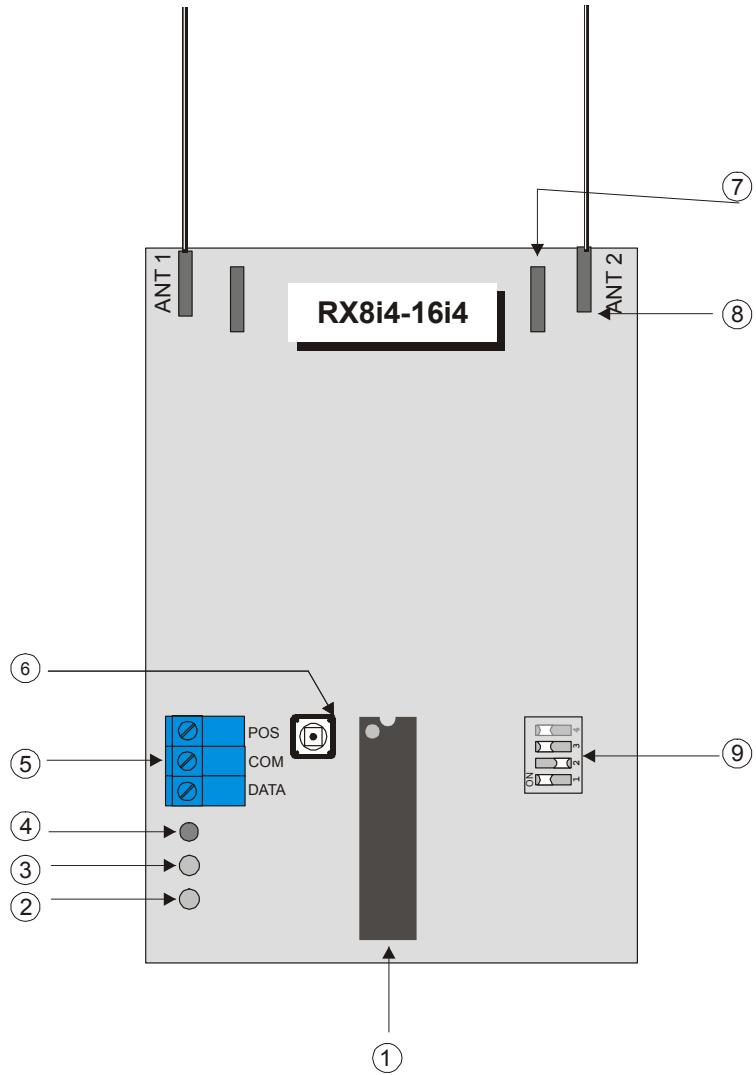
If the keypad is sounding an alarm or the sounder is on, it can be silenced by entering a code with the authority for the area(s) in alarm.



*The **Exit** , **Bypass**  and **Alarm Memory *3** function keys work only if an individual partition is selected.*

16 SETTING UP RF ZONES – RX8i4-16i4

The RX-Series receiver modules add wireless capabilities to a **CSx75** controller. There are eight zones for an RX8i4 and 16 zones for an RX16i4. Adding a receiver module makes a **CSx75** control panel compatible with the RX wireless transmitters and keychain touchpads or keyfobs.



1	Processor	4	Bus supervision LED	7	Not used
2	No function	5	Keypad bus connection	8	Antenna
3	Wireless communication LED	6	Lid tamper	9	Dip switches

16.1 Setting the DIP switches

The position of all switches is only updated when the RX8i4-16i4 is powered up. Before you change the position of these switches you must power down the expander.

Module Number	DIP Switch 1	DIP Switch 2	DIP Switch 3	DIP Switch 4
34	On	On	On	Not Used
33	Off	On	On	Not Used
32 (Default)	On	Off	On	Not Used
39	Off	Off	On	Not Used
38	On	On	Off	Not Used
37	Off	On	Off	Not Used
36	On	Off	Off	Not Used
35	Off	Off	Off	Not Used

16.2 Module status conditions

When you apply power to the CSx75, the middle LED (red) should start blinking. The following table defines the different states of the red and yellow LEDs.

LED	Module Status
Red blinking	Normal data communication with the CSx75.
Red off	No data communication with the CSx75. Check the wiring and power source.
Yellow blinking	Receiving radio signals from learn mode wireless sensors.
Yellow off	No radio signals currently being received.



The red LED at the bottom of the module may emit a dim glow but is not used as an indicator and can be ignored.

16.3 Wiring the RX8i4-16i4

Wire the bus according to the table below.

16.3.1.1 Terminal description

Terminal	Description
Power	Connect to the KP POS terminal of the CSx75. Current draw is 30 mA.
Gnd	Connect to the KP GND terminal of the CSx75.
Data	Connect to the KP DATA terminal of the CSx75.

16.3.2 Specifications

Operating power	12 VDC supplied from CSx75
Compatibility	Compatible with CS175-275-575-875

Frequency	433 MHz for the RX8i4 and RX16i4
Current draw	20 mA Maximum
Operating temperature	0 to 49 °C
Dimensions	11 cm wide * 8.1 cm high * 2.54 cm deep
Shipping weight	95 g

16.4 Programming the RX8i4-16i4

In order to program the Rx8i4-16i4 you must do the following:

- Determine the transmitter settings: determine the different settings for the wireless sensors.
- Enroll the modules: set-up the module to be supervised by the CSx75 control panel.
- Program the module: put the module into program mode so you can start programming the transmitters and enter the settings for transmitters and partitions.

16.4.1 Determine transmitter settings

When programming wireless transmitters into the module, there are various options and partitions you can set for each transmitter. These settings appear in the segments of each programming location. The default settings shown for segments 1 and 2 apply to all zone locations from 1 to 168.

16.4.2 Special settings for door/window transmitters and wireless smoke detectors.

Use the following guidelines when setting feature 4 and 5 for door/window transmitters and wireless smoke detectors.

- Feature 4, input option 1:
 - For door/window transmitters, turn this feature on to disable the internal reed switches.
 - For wireless smoke detectors with tamper switches, turn this feature on to enable the tamper feature.
 - This option must be off (disabled) when using wireless smoke detectors without tamper switches.
- Feature 5, input option 2:
 - For door/window transmitters that use a normally open external contact, leave this feature off (N/O).
 - For door/windows transmitters that use a normally closed external contact, leave this feature on (NC).

Location 0	Learn-in mode
-------------------	----------------------

This location is used to learn in devices. The segment used refers to the zone number required.

Location 1 Wireless sensor 1 characteristics (two segments, FSD)

This location defines the characteristics of the wireless sensors learned into zone 1.

Segment 1	1	Enable sensor	(Default =on)
	2	Supervised	(Default =on)
	3	Use Fire Supervision	(Default =off)
	4	Input option 1	(Default =on)
	5	Input option 2	(Default =off)
	6-8	Reserved	
Segment 2	1	Partition 1 keyfob	(Default =on)
	2	Partition 2 keyfob	(Default =on)
	3	Partition 3 keyfob	(Default =on)
	4	Partition 4 keyfob	(Default =on)
	5	Partition 5 keyfob	(Default =on)
	6	Partition 6 keyfob	(Default =on)
	7	Partition 7 keyfob	(Default =on)
	8	Partition 8 keyfob	(Default =on)

Location 2 to 168 Wireless sensor 2 to 168 characteristics (two segments, FSD)

These locations define the characteristics of the wireless sensors learned into zone 2 to 168. The information in these segments is the same as the information in location 1, zone 1.

Location 169 to 192 Reserved**Location 193 Receiver features (one segment, FSD)**

Segment 1	1	On: enables jam detection.
	2	On: enables sequential programming method.
	3	Keyfob user ID (default = off). Off: all keyfobs report to the panel as user 99. On: keyfobs report as the learned zone.
	4	Enable antenna tamper, reports as box tamper (Default = Off).
	5	Case tamper enabled.
	6-8	Reserved

Location 194 Starting zone (one segment, ND)

Segment 1	0	Starting zone is zone 1
	1	Starting zone is zone 9
	2	Starting zone is zone 17
	3	Starting zone is zone 25
	4	Starting zone is zone 33
	5	Starting zone is zone 41
	6	Starting zone is zone 49
	7	Starting zone is zone 57
	8	Starting zone is zone 65
	9	Starting zone is zone 73
	10	Starting zone is zone 81
	11	Starting zone is zone 89
	12	Starting zone is zone 97
	13	Starting zone is zone 105
	14	Starting zone is zone 113
	15	Starting zone is zone 121
	16	Starting zone is zone 129
	17	Starting zone is zone 137
	18	Starting zone is zone 145
	19	Starting zone is zone 153
	20	Starting zone is zone 161

Location 195 Supervision timers (three segments, ND)

This location contains the time values for supervision.

Segment 1 Number of **hours** for non fire transmitters.

Segment 2 Number of **hours** for fire (smoke) transmitters.

Segment 3 Number of **minutes** for NACOSS check in (short window).

16.4.3 Programming guidelines

The following guidelines should be followed when programming the RX8i4-16i4 modules.

- When a transmitter is learned into memory, the module starts from that specific locations.
- Transmitters take priority over the hardwire on-board zones. Use the on-board hardwire zones first and start learning transmitters in the next zone.



Before you start programming, use the 910# command to default the RX8i4-16i4 module.

Steps

1. Press *8 to enter programming mode.
2. Enter a Go to Program Code. The keypad prompts you to enter a module number.
3. Enter the module number and press #. The module number is the DIP switch setting and can be from 32 to 39.
4. For new installations, press 910# to set the default module settings.
5. Press 193#, change the flags 1-2-4 and press *. This enables the Auto advance feature after each zone is learned in.
6. Press 194#, followed by 1, to start learning in from zone 9.
7. Press 0# to enter the starting sensor learning location.
8. Press XX* where XX is the zone number (1 to 168) and * is the entry key.
9. Trip the desired transmitter (within 250 seconds) as described below. Listen for the ding-dong for confirmation. If option 193, segment 1, option 2 is enabled, the panel automatically switches to the next zone to learn in the next transmitter.
10. Repeat steps 5 to 7 to program the remaining transmitters.
11. Press the **Exit** key twice to exit programming mode.



Three beeps from the keypad indicates an entry error. This occurs if you enter a transmitter number that is not within the module's zone block or if you try learning a sensor that is already learned into the the module..

Transmitter	Action
Door/Window	Activate tamper switch by removing the cover.
Door/Window with external contact	Activate tamper switch by removing the cover (Feature 3, input option 1, must be on).
PIR	Activate tamper switch by removing back plate from PIR.
Smoke detector	Press and hold the test button.
Single Button Panic	Press and hold the button.
Keyfobs	Press and hold the arm and disarm buttons together.

Repeater

Press and then release the tamper switch.

16.4.4 Deleting transmitters

The following steps describe how to delete transmitters from the module.

The module ignores a transmitter but does not remove its identification from the module's memory. The transmitter can be reactivated later or a new one can be learned into the zone.

Steps

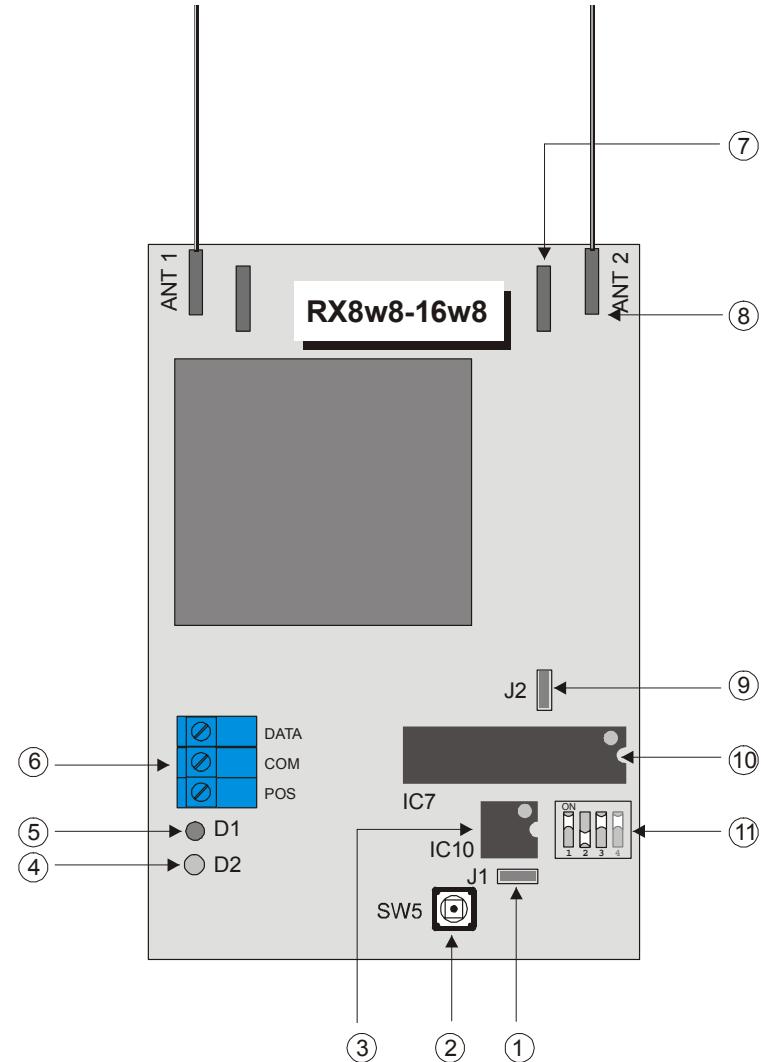
1. Press ***8** to enter programming mode.
2. Enter a Go to Program Code. The keypad prompts you to enter a module number.
3. Enter the module number and press **#**. The module number is the DIP switch setting, for example 35,36,38 or 39.
4. Press **XX#** where XX is the zone number (1 to 168) and where **#** is the entry key.
5. Press 1 to change the transmitter feature 1 (Transmitter Enabled). The first bit in the segment changes from '1' to '0', to indicate that the wireless component is disabled.
6. Repeat steps 4 to 5 until all transmitters are deleted.
7. Press the **Exit** key twice to exit programming mode.

16.4.5 Testing wireless transmitters

Use the walktest to test the wireless transmitters.

17 SETTING UP RF ZONES – RX8w8-16w8

The RX-Series receiver modules adds 868 MHz wireless capabilities to a CSx75 controller. There are eight zones for an RX8w8 and 16 zones for an RX16w8. Adding a receiver module makes a CSx75 control panel compatible with the RX wireless transmitters and keychain touchpads or keyfobs.



1	Jumper setting	5	Bus supervision LED	9	Jumper setting
2	Lid tamper	6	Keypad bus connectionn	10	Processor
3	Eeprom	7	Not used	11	DIP switches
4	Wireless communication LED	8	Antenna		

17.1 Setting the DIP switches

Decide the starting zone of each zone expander. The starting zone must be on a boundary of eight zones. The eight or 16 zones for the module move out from this starting position.

To set the starting zone, set the DIP switch according to the table below.

The position of all switches is updated only when the RX8w8-16w8 is powered up. Before you change the position of these switches you must power down the expander.



Some RX8w8 and RX16w8 receivers have DIP Switches labels with On/Off rather than Open/Closed labels. The following table lists both references. The label on the receiver always refers to Open/Close(O/C).

Module Number	DIP Switch 1	DIP Switch 2	DIP Switch 3	DIP Switch 4
34	C (On)	C (On)	C (On)	Not Used
33	O (Off)	C (On)	C (On)	Not Used
32 (Default)	C (On)	O (Off)	C (On)	Not Used
39	O (Off)	O (Off)	C (On)	Not Used
38	C (On)	C (On)	O (Off)	Not Used
37	O (Off)	C (On)	O (Off)	Not Used
36	C (On)	O (Off)	O (Off)	Not Used
35	O (Off)	O (Off)	O (Off)	Not Used

17.2 Module Status Conditions

When you apply power to the CSx75, the LED (red) should start blinking. The following table defines the different states of the red and green LEDs.

LED	Module Status
Red blinking	Normal data communication with the CSx75.
Red off	No data communication with the CSx75, check the wiring and power source.
Green blinking	Receiving radio signals from learn mode wireless sensors.
Green off	No radio signals currently being received.

17.3 Wiring the RX8w8-16w8

Wire the bus according to the table below.

17.3.1 Terminal description

Terminal	Description
POS	Connect to the KP POS terminal of the CSx75 . Current draw is 30 mA.
COM	Connect to the KP GND terminal of the CSx75 .
DATA	Connect to the KP DATA terminal of the CSx75 .

17.3.2 Specifications

Operating power	12 VDC supplied from CSx75 .
Compatibility	Compatible with CS175-275-575- 875
Frequency	868 MHz for the RX8w8 and RX16w8
Current draw	30 mA maximum
Operating temperature	0 to 49°C
Dimensions	11 cm wide x 8.1 cm high x 2.54 cm deep
Shipping weight	105 g

17.4 Programming the RX8w8 – RX16w8

In order to program the RX8w8 – RX16w8 you must do the following:

- Determine the transmitter settings: determine the different settings for the wireless sensors.
- Enroll the modules: set-up the module to be supervised by the **CSx75** control panel.
- Program the module: put the module into program mode so you start programming the transmitters and enter the settings for transmitters and partitions.

17.4.1 Receiver installation and procedure (for Belgium)

The RX9008 antenna kit fits the RXxxW8 dual antenna receiver family. It is used during installation, commissioning and testing of the wireless security system. Its purpose is to ensure a sufficient margin in signal strength during normal operation by reducing the receiver sensitivity during installation and maintenance checks.

Steps

1. Install the system.
2. Replace both receiver antennas with the RED RX9008 antennas.
3. Power-up and learn in all the transmitters.
4. Relocate transmitters with bad reception if necessary.
5. After successful installation, remove the RX9008 antennas and re-install the original receiver antennas.

17.4.2 Programming the zone configuration and partition

All zones are programmed via the CSx75 panel and keypad. For instructions on accessing and programming the CSx75, as well as changing the characteristics of a configuration group, consult the CSx75 Installation Manual.

Location 0 Learn-in mode

This location is used to learn in devices. The segment used refers to the zone number required.

Location 1 to 168 Transmitter features (two segments, FSD)

These locations contain two segments for transmitter specific functions.

Segment 1	1	Transmitter enabled	(Default =On)
	2	Transmitter supervised	(Default =On)
	3	User Fire (smoke)	Default =Off supervision windows
	4	Reserved	
	5	Reserved	
	6	Reserved	
	7	Reserved	
	8	Reserved	
Segment 2	1	Partition 1 keyfob	(Default =On)
	2	Partition 2 keyfob	(Default =On)
	3	Partition 3 keyfob	(Default =On)
	4	Partition 4 keyfob	(Default =On)
	5	Partition 5 keyfob	(Default =On)
	6	Partition 6 keyfob	(Default =On)
	7	Partition 7 keyfob	(Default =On)
	8	Partition 8 keyfob	(Default =On)

Location 193 Receiver features (one segment, FSD)

Segment 1	1	On: jam detection enabled.
	2	On: sequential programming method enabled.
	3-8	Not used

Location 194 Starting zone (one segment, ND)

Segment 1	0	Starting zone is zone 1
	1	Starting zone is zone 9
	2	Starting zone is zone 17
	3	Starting zone is zone 25
	4	Starting zone is zone 33
	5	Starting zone is zone 41
	6	Starting zone is zone 49
	7	Starting zone is zone 57
	8	Starting zone is zone 65
	9	Starting zone is zone 73
	10	Starting zone is zone 81
	11	Starting zone is zone 89
	12	Starting zone is zone 97
	13	Starting zone is zone 105
	14	Starting zone is zone 113
	15	Starting zone is zone 121
	16	Starting zone is zone 129
	17	Starting zone is zone 137
	18	Starting zone is zone 145
	19	Starting zone is zone 153
	20	Starting zone is zone 161

Location 195 Supervision timers (three segments, ND)

This location contains the time values for supervision.

Segment 1	Number of minutes for non-fire transmitters.
Segment 2	Number of minutes for fire (smoke) transmitters.
Segment 3	Number of minutes for NACOSS check in (short window).



For Belgium the following parameters must be configured:

Segment 1: Number of minutes, for non-fire transmitters: -> 120 minutes = 2 hours.

Segment 2: Number of minutes, for fire(smoke) transmittters: -> 240 minutes.

Segment 3: Number of minutes, for NACOSS checkin -> 15 minutes.

Location 199 RSSI check zone

This location is used to set a zone for an RSSI (Received Signal Strength Indication) check.

Location 200 RSSI result

This location is used to show the RSSI reading from the zone tested in location 199.

17.4.3 Programming guidelines

The following guidelines should be followed when programming the RX8w8-16w8 modules.

- When a transmitter is learned into memory, the module starts from that specific location.
- **Transmitters take priority over the hardwire on-board zones. Use the on-board hardware zones first and start learning transmitters in the next zone.**



*Before you start programming, use the **910#** command to default the RX8w8-16w8 module.*

Steps

1. Press ***8** to enter programming mode.
2. Enter a Go to Program Code. The keypad prompts you to enter a module number.
3. Enter the module number and press **#**. The module number is the DIP switch setting and can be from 32 to 39.
4. For new installations, press **910#** to set the default module settings.
5. Press **193#**, change the flags 1-2-4 and press *****. This enables the Auto advance feature after each zone is learned in.
6. Press **194#**, followed by **1**, to start learning in from zone 9.
7. Press **0#** to enter the starting sensor learning location.
8. Press **XX#** where XX is the zone number (1 to **168**) and **#** is the entry key.
9. Trip the desired transmitter (within 250 seconds) as described below. Listen for the ding-dong for confirmation. If option 193, segment 1, option 2 is enabled, the panel automatically switches to the next zone to learn in the next transmitter.
10. Repeat steps 5 to 7 to program the remaining transmitters.
11. Press the **Exit** key twice to exit programming mode.



Three beeps from the keypad indicates an entry error. This occurs if you enter a transmitter number that is not within the module's zone block or if you try learning a sensor that is already learned into the module.

Transmitter	Action
Door/Window	Activate tamper switch by removing the cover.
Door/Window with external contact	Activate tamper switch by removing the cover.
PIR	Activate tamper switch by removing back plate from PIR.
Smoke detector	Press and hold the test button.
Single Button Panic	Press and hold the button.
Dual Button Panic	Press and hold the buttons together.
Keyfobs	Press and hold the arm and disarm buttons together.

17.4.4 Deleting transmitters

The following steps describe how to delete transmitters from the module.

The module ignores a transmitter but does not remove the transmitter identification from its memory. The transmitter can be reactivated later or a new one can be learned into the zone.

Steps*

1. Press ***8** to enter programming mode.
2. Enter a **Go to Program Code**. The keypad prompts you to enter a module number.
3. Enter the module number and press **#**. (This is the DIP switch setting and can have a value between 32 to 39).
4. Press **XX#** where XX is the zone number (1 to 168) and where **#** is the entry key.
5. Press 1 to change the transmitter feature 1 (Transmitter Enabled). The first bit in the segment changes from '1' to '–', to indicate that the wireless component is disabled.
6. Repeat steps 4 to 5 until all transmitters are deleted.
7. Press the **Exit** key twice to exit programming mode.

17.4.5 Testing wireless transmitters

During the installation and/ commissioning of the system, it is mandatory to check the signal strength of all transmitters and record the signal strength in the system documentation.

Part of the commissioning procedure of an 868 MHz wireless system is to record the RSSI readings from each device.

Steps

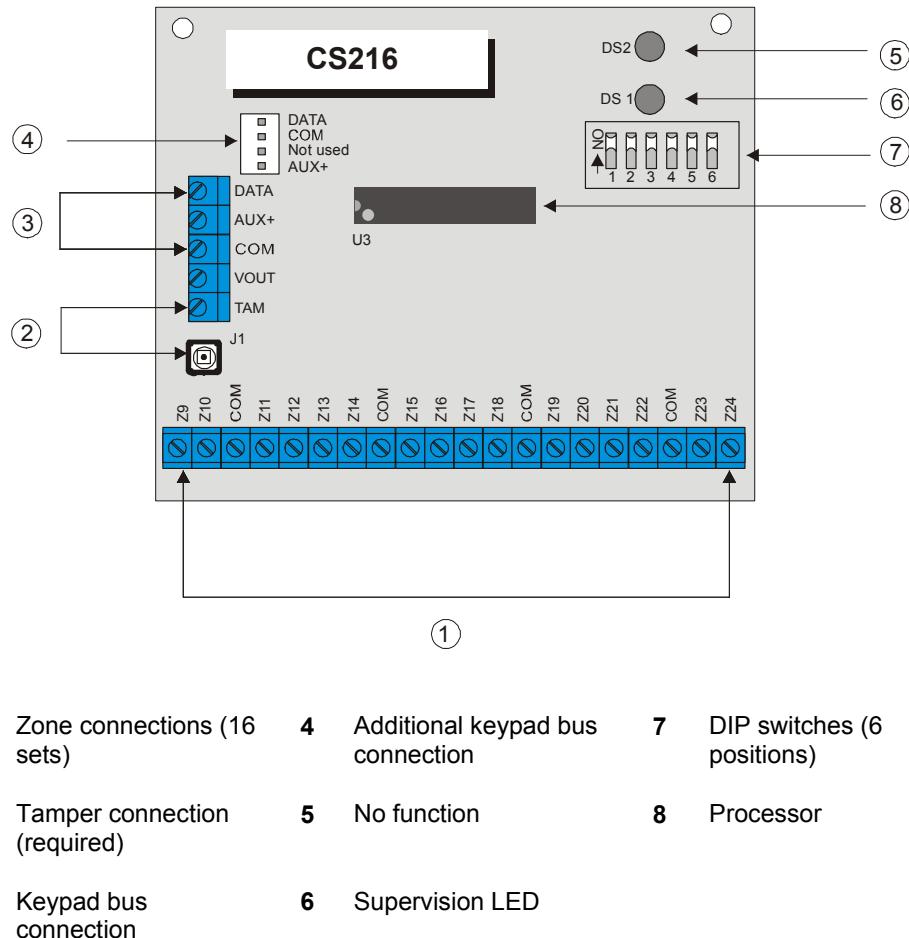
1. Press ***8** to enter programming mode.

2. The keypad prompts you to enter a module number.
3. Enter the module number and press **#**. The module number is the DIP switch setting and can be from 32 to 39.
4. Press **199#** to select location 199.
5. Press **XX#** where XX is the zone number (1 to 168) and **#** is the entry key.
6. Perform a walktest on the device. PIR detectors transmit only if there has been no movement within the area for two minutes.
7. When the device has transmitted, you can record the reading from location 200. Press **200#** to get the RSSI reading.
8. Note the RSS reading and repeat steps 4 to 7 for the other detectors.

18 CS216 HARDWARE ZONE EXPANDER

The CS216 is a microprocessor-controlled 16-zone expander for the CSx75 control panel. Up to **20** CS216 expanders can be added to the CSx75 control panel with a maximum zone count of **168** zones. Each expander has an optional tamper switch and power isolator making it ideal for use in a remote location.

Roller switch zones can only be used on the CSx75 control panel. They cannot be used on a CS216 hardware zone expander.



18.1 Setting the DIP switches

Decide the starting zone of each zone expander. The starting zone must be on a boundary of eight zones. The 16 zones for this module will move out from this starting position. There are stick-on zone labels to indicate the zone numbers that you select.

To set the starting zone, set the DIP switch according to the table below.

1

The position of all switches is updated only when the CS216 is powered up. Before you change the position of these switches you must power down the expander.

Starting Zone Number	Module Number	DIP Switch 1	DIP Switch 2	DIP Switch 3	DIP Switch 4	DIP Switch 5
9	23	On	Off	Off	Off	Off
17	16	Off	On	Off	Off	Off
25	17	On	On	Off	Off	Off
33	18	Off	Off	On	Off	Off
41	19	On	Off	On	Off	Off
49	20	Off	On	On	Off	Off
57	21	On	On	On	Off	Off
65	96	Off	Off	Off	On	Off
73	97	On	Off	Off	On	Off
81	98	Off	On	Off	On	Off
89	99	On	On	Off	On	Off
97	100	Off	Off	On	On	Off
105	101	On	Off	On	On	Off
113	102	Off	On	On	On	Off
121	103	On	On	On	On	Off
129	104	Off	Off	Off	Off	On
137	105	On	Off	Off	Off	On
145	106	Off	On	Off	Off	On
153	107	On	On	Off	Off	On
161	108	Off	Off	On	Off	On

18.1.1 DIP switch 6

To disable the second group of eight zones on a zone expander, turn on DIP switch 6.

18.2 Wiring the CS216

Wire the zones according to the table below. Any unused zones must have an EOL resistor across them, unless all eight are disabled by DIP switch 6.

The CS216 is similar to the CS507. A white connector J9 can be used to connect to the CSx75 panel in a housing mounted inside the control unit.

18.2.1 Terminal description

Terminal	Description
	Connector on the left side
DATA	Connect to the KP DATA terminal of the CSx75. (See the wiring diagram for wire specifications.)
AUX	Connect to the KP POS terminal of the CSx75. Current draw is 30 mA.
COM	Connect to the KP COM terminal of the CSx75.
Vout	Can be used to power devices directly from the CS216. Power is coming from the CSx75, therefore the current draw of these devices must be added to the total current draw of the CS216. This output is current limited to 100 mA.
TAM	Connect as shown below. If not used, connect to a COM terminal.
	Bottom connector
Z9	Connect to one side of zone 9 loop. Connect the other side to COM terminal. Open or short causes alarm. (See the wiring diagram for examples.)
COM	Common (-) terminal for zones 9 and 10.
Z10	Connect to one side of zone 10 loop. Connect the other side to COM terminal. Open or short causes alarm. (See the wiring diagram for examples.)
Z11-Z24	Connect as described for Z9 and Z10.

18.2.2 Specifications

Operating power	12 VDC supplied from CSx75
Auxiliary power	Supplied from CSx75. Current limited to 100 ma
Current draw	30ma
Loop resistance	4K7 Ohms maximum
Loop response	Selectable 50 ms or 500 ms
Operating temperature	0 to 49°C
Dimensions	10 cm wide * 8 cm high * 2.54 cm deep
Shipping weight	115 g

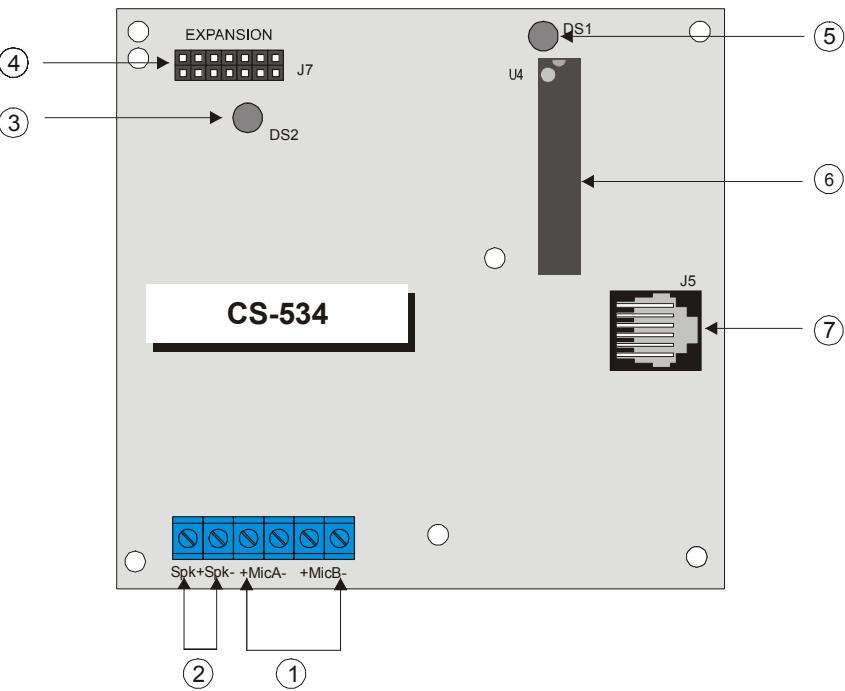
18.3 Programming the CS216

18.3.1 Programming the zone configuration and partition

All zones are programmed via the CSx75 panel and keypad. See *Location 36* on page 67 for information on how to access and program the CSx75 and how to change the characteristics of a configuration group.

19 CS534 AUDIO BOARD

The CS534 is a two-way audio (voice) communicator for the CSx75 alarm panel. Once the alarm panel has communicated an alarm, the CS534 allows a monitoring service operator to monitor a customer's premises for listen-in purposes or basic two-way voice communication. This procedure is controlled from the central station by use of a touch tone telephone.



1	Microphone channels A and B	4	Expansion port
	Wire run can be 300 m if microphone wires are in a separate jacket from the speaker, 150 m if in the same jacket.	5	Bus supervision LED
2	Speaker terminals	6	Processor
	<ul style="list-style-type: none">Maximum speaker wire run = 300 mMinimum speaker rating is 5 W, 8 ohms	7	X-10 Connection
3	Supervision LED		

19.1 Features definition

19.1.1 Anti-lockup tone

If enabled, a tone is heard at the central station at programmed intervals during a two-way session. During this tone, the CS534 disables the microphones so that it can detect a keypress from the central station. This is useful in a noisy environment to prevent a loss of central station control. If this occurs, press and hold the **1** key to engage Talk mode. (Location 3).

19.1.2 Call back mode

If programmed for this mode, the CS534 starts a timer when the control panel releases the line. (Location 0, segment 1 and location 3, segment 3) During this time, the central station can call the premises and begin the two-way session by entering the call back access code (Location 1).

19.1.3 Call-in mode

If programmed for this mode, the homeowner can call the premises and listen to the audible conditions within the home. The number of rings programmed in location 4, segment 4 instructs the CS534 when to pick up the line. Program a 0 to disable this function. A master code is required within 20 seconds after pickup to enable call-in mode.

19.1.4 Call-in mode answering machine defeat

If this feature is enabled, the CS534 listens for a master code for four seconds after an answering machine, or some other device, has answered the premises' telephone. The user has 30 seconds to enter the code. Call-in must be enabled in location 4, segment 4. (Location 0, segment 6)

19.1.5 High gain and low gain listen-in mode

These are modes in which the central station can listen in to the premises. High gain listen-in is generally used in environments that produce very low noise. Low gain listen-in is used in environments where background noise may distort the audio during listen-in. (Location 4, segments 1 and 2)

19.1.6 Line hold mode

If programmed for this mode, the CS534 seizes the line immediately when the control panel releases the line. A two-way session begins instantly or when the line hold digit is entered, if programmed. (Location 0, segment 1, location 2 and location 3, segment 1)

19.1.7 Speaker lockout

If this feature is enabled and the CSx75 reports a duress, silent panic, or holdup alarm, the CS534 does not allow the central station to turn on the speaker on the premises.

19.2 Wiring the CS534

Wire the zones according to the table below.

19.2.1 Terminal description

Terminal	Description
	Connector on the left side
1	Connect positive side of microphone #A
2	Connect negative side of microphone #A
3	Connect positive side of microphone #B
4	Connect negative side of microphone #B

SPK+	Connect to the speaker(s). Maximum speaker wire run: 1000' (300m). Minimum speaker rating: 5 Watts, 8 Ohms. Do not go below 4 Ohms.
-------------	---

19.2.2 Specifications

Operating power	12 VDC supplied from CSx75
Current (Standby)	50 mA
In Session	100 mA
Operating temperature	0 to 49°C
Dimensions	10 cm wide * 9.5 cm high * 2.54 cm deep
Shipping weight	100 g
Telephone Requirements	Touchtone

19.3 General operating instructions

The system operates in the following manner, regardless of how a two-way session is started.

- The session timer is started (Location 3).
- All microphones are on (Location 0).
- Low gain listen-in audio mode is selected (automatic).
- Level 0 command set is active (automatic).

The CS534 operates in one of two modes programmed in location 0, segment 1.

19.4 Line-hold or call back

The following sections explain how the CS534 operates in line-hold or call back mode.

19.4.1 Line hold mode

Steps

1. An alarm is recognized.
2. The phone line is seized from the control panel and all phones on the premises.
3. The line disconnects (goes off hook).
4. The CS534 sends a tone indicator to the central station. See *Tones* on page 113 for more information.
5. If a line hold digit (location 2) has been programmed, the system waits for the digit to be received before a two-way session is started. If the digit is not received

before the time-out period (location 3, segment 1), the system returns to the stand-by mode and waits for a new trip.

6. If the line hold digit is received or not programmed, the system starts a two-way session.

19.4.2 Call back mode

Steps

1. An alarm is recognized.
2. The phone line is seized from the control panel and all phones on the premises.
3. The CS534 starts the call back window timer (location 3, segment 3). If the time runs out before the number of rings is reached, the system returns to the stand-by mode and waits for a new trip.
4. Waits to receive the call back, up to the selected number of minutes programmed in location 3, segment 3 for the first ring.
5. Sends a continuous indicator tone to the central station until the access digit is received, or the maximum number of attempts in location 3, segment 4 is exhausted. When a digit is received, the indicator tone is silenced.
6. Waits for the access digit (location 1) to match. The reset [#] key may be used during PIN entry to clear the PIN buffer. If the access digit does not match after a set number of attempts (location 3, segment 4) the system returns to the stand-by mode and waits for a new trip. If the digit is validated, the system silences the siren and starts a two-way session.

19.4.3 Control levels

Levels of the modes may be changed at any time by pressing * followed by the level number you wish to access. If no key is pressed for three seconds, the buffer is automatically cleared. Press [*]-[0] to return to the beginning. Levels 1, 2 and 4 are not supported. Attempts to access these levels revert to Level 0.

- If a new alarm in the same partition is activated during a two-way session, the session timer can be extended by pressing a key during the time period programmed in location 3, segment 2.
- If a new alarm in a different partition is activated during a two-way session, the timer is reduced to 20 seconds and cannot be extended.

LEVEL	BASIC CONTROL LEVEL	
	0	Returns to the initial session settings when it is tripped. This includes the microphone selection and audio mode.
1		High gain talk to the premises and extends session time.
3		High gain listen-in from the premises and extends session time.
2, 4, 5, 7, 8, 9		Extends session time.
6		Low gain listen-in from the premises and extends session time.
88		Terminates session and starts the call back mode.

	99	Terminates session and returns to the stand-by mode and waits for a new trip.
LEVEL 3	MICROPHONE CONTROL (ZONING)	
	0	Returns to the initial session settings when it was tripped. This includes the microphone selection and audio mode.
	1	Turns microphone 1 on, microphone 2 off and extends session time.
	2	Turns microphone 2 on, microphone 1 off and extends session time.
	3, 4, 5, 6, 7, 8	Extends the session time.
	9	Turns both microphones on and extends the session time.
LEVEL 5	OUTPUT / RELAY CONTROL LEVEL (NEGATIVE—TURN OFF) <small>NOTE: This feature requires X-10 Interface.</small>	
	0	Returns to the initial session settings when it is tripped. This includes the microphone selection and audio mode.
	1 – 9	Turns the corresponding output/relay off. A negative confirmation tone (two low beeps) is heard. See <i>Tones</i> on page 113 for more information.
LEVEL 6	OUTPUT / RELAY CONTROL LEVEL (POSITIVE—TURN ON) <small>NOTE: This feature requires X-10 Interface.</small>	
	0	Returns to the initial session settings when it is tripped. This includes the microphone selection and audio mode.
	1 - 9	Turns the corresponding output/relay on. A positive tone is heard.
LEVEL 7	STATUS CHECK	
	0	Returns to the initial session settings when it is tripped. This includes the microphone selection and audio mode.
	1	Armed status: If partition 1 is armed, a positive tone is heard. If disarmed, a negative tone is heard.
	2	Ready status: If partition is in Ready status, a positive tone is heard. If it is not ready, a negative tone is heard.
	3	Power status: If AC and battery are good, a positive confirmation tone is heard. If either AC or battery are bad, a negative tone is heard.
	4 – 9	Extends the session time.
LEVEL 8	ARMING / DISARMING PARTITION 1	
	0 – 9	Enter your PIN user code to arm or disarm the system. If partition 1 is armed, a positive beep is heard. If partition 1 is disarmed, a negative beep is heard.

19.4.4 Tones

Indicator tones may be heard at the central station during a two-way session. The definition of these indicator tones is as follows:

LOW = 400 Hz

MID = 1000 Hz

HIGH = 1600 Hz

Tone	Description
One high tone for 100 mS	Time remaining indicator “A”
One mid tone for 100 mS	Time remaining indicator “B”
One mid tone for 100 mS, off for 100 mS, one high tone for 100 mS	New alarm alerts for same partition
One high tone for 100 mS, off for 100 mS, one mid tone for 100 mS, off for 100 mS, one high tone for 100 mS	New alarm alerts for different partition
Continuous on/off high tone every 100 mS; will stop after a digit is received	System waiting for access PIN
One low tone for 200 mS (if enabled)	Anti lock-up
One mid tone for 500 mS	Acknowledgement to level change command
One mid tone for 250 mS, off for 250 mS, one mid tone for 250 mS, off for 250 mS, one mid tone for 250 mS	Error tone
One low tone for 100mS	Relay / output turned on, or Positive status response, or Partition 1 armed
One low tone for 100mS; off for 200mS; one low tone for 100 mS	Relay / output turned off, or Negative status response, or Partition 1 disarmed

19.5 Programming the CS534

19.5.1 Programming the CS534 parameters

All parameters are programmed via the CSx75 panel and keypad. See *Programming the system* on page 40 for more information.

Location 0 Programming features (one segment, FSD)	
1	Line hold or call back mode (Default = call back mode) <ul style="list-style-type: none"> • Off: the CS534 does not release the line after any communication, which causes a listen-in session to be triggered. The listen-in session starts immediately. • On: the CS534 releases the line and waits for the central station to call it back before starting a listen-in session.
2	Normal two-way or listen-in only (Default = normal two-way)

- On: listen-in only mode: this allows the central station to listen to the activity at the premises.
- Off: normal two-way mode: this allows the central station to communicate with the person(s) at the premises. The procedure is controlled from the central station by using keypresses on a touch tone telephone.

3 Speaker Lockout (default = Off)

- Off: the Automatic Speaker Lockout is enabled.
- On: the Speaker Lockout is disabled.

4 Microphone-A start-up selection (default = on)

- Enabling this feature will turn on microphone-A at start-up.

5 Microphone-B start-up selection (default = on)

- Enabling this feature will turn on microphone-B at start-up.

6 Call in feature answering machine defeat enabled (default = off)

- When a call-in is made, at least one ring must be received. The line is picked up and the CS534 listens for a master code to be entered within the 30-second time limit. If the answering machine defeat is enabled, the code must be entered even if someone answers the phone. If this feature is not enabled, the CS534 waits for the number of rings programmed in location 4, segment 4. Call-in must be enabled in location 4, segment 4.

7 -8 • This feature enables Level 7 – Status Check and Level 8 – Arming/Disarming Partition 1. The factory default for this segment is off.

Location 1 Call back access code (default = 123456) (six segments, ND)

This location contains the access code used to start a listen-in session when the CS534 is in call back mode. The call back access code can be up to a maximum of six digits. The valid entries are 0 to 15 (10 = *, 11 = #, 12 = none, 13 to 15 = any digit). If less than six digits are desired, program a 15 at the end of the desired code. If segment 1 contains a 15, any digit accesses the CS534. If segment 1 is a 12, no access code is required.

Location 2 Line hold mode access digit (default = 15(F) (one segment, ND)

This digit is required to start a two-way session if line-hold mode is used. Valid entries are 0 to 15 (10 = *, 11 = #, 12 = none, 13 to 15 = any digit). If segment 1 is a 12, no access digit is required. If it is programmed as a 15, any digit accesses the CS534.

Location 3 Timing options (8 segments, ND)

Seg 1 Line hold timeout (Default = 60 seconds)

- Determines how long the CS534 waits for the line-hold digit programmed in location 2 while in the line-hold mode. When a digit is pressed, the timer is reset. If the digit is not received during this time, the CS534 hangs-up (disconnects). This time is programmable from 10 to 255 seconds for each digit.

Seg 2 New trip hangup time (Default = 20 seconds)

- Determines where the CS534 sets the session timer when a new trip is received on the same partition during a two-way session. This time is programmed from 1 to 255 seconds and is extended if there is any activity from the central station. If an alarm occurs in the same partition, pressing a key in this time period extends the session timer. If the alarm is in a different partition, the timer is reduced automatically and allows the timer to be restarted.

Seg 3 Call back windows timer (Default = 5 minutes)

- Determines the amount of time, in one-minute increments, the CS534 waits for a call back when enabled in location 0, segment 1 or initiated by the central station. Possible increments are 1 to 255 minutes. See *Control levels* on page 112 for more information.

Seg 4 Wrong PIN digit entries (Default = 12)

- Determines the maximum number of digits that can be entered for call back and call-in features (location 0, segments 1 and 6). Valid entries are 6 to 255. (Default = 12)

Seg 5 Session inactivity hang-up time (Default = 90 seconds)

- Determines how long the CS534 remains on the phone line with no activity from the central station. This time can be programmed from 30 to 255 seconds.

Seg 6 Time remaining tone indicator-A (Default = 20 seconds)

- Determines how many seconds remain when the CS534 sends tone indicator "A" to the central station. This time is used to alert the central station that the two-way session is terminated if there is no further activity from the central station. Valid entries are 1 to 255 seconds.

Seg 7 Time remaining tone indicator-B (Default = 10 seconds)

- Determines how many seconds remain when the CS534 sends tone indicator-B to the central station. This time is used to alert the central station that the two-way session is terminated if there is no further activity from the central station. Valid entries are 1 to 255 seconds.

Seg 8 Anti-lock-up tone time (Default = 0 seconds)

- Determines at what interval the anti-lock-up tone is heard at the central station. This tone is used to prevent noise in an exceptionally loud environment from interfering with central station's control of the two-way session. The possible values are 0 to 255 seconds. If a zero "0" is programmed (default), it is disabled and no tone is generated.

Location 4 Volume/ring control (four segments, ND)

Segment 1 Low gain listen-in mode microphone volume (Default = 5)

- Controls the volume of the microphones when low-gain listen-in mode is selected by the central station. The possible values for this location are 0 to 9 (maximum volume is 9 and minimum is 0).

Segment 2 High gain listen-in mode microphone volume (Default = 9)

- Controls the volume of the microphones when high-gain listen-in mode is selected by the central station. The possible values are 0 to 9 (maximum volume is 9, minimum volume is 0).

Segment 3 Speaker volume (Default = 9)

- Governs the volume of the speaker when talk is selected by the central station. The possible values for location 4 are 0 to 9 (maximum volume is 9, minimum volume is 0).

Segment 4 Number of rings to answer for call-in feature (Default = 0)

- Determines the number of rings the CS534 must see before answering the call while in call-in mode (location 0, segment 6). Valid entries are 0 to 9. If a zero "0" is programmed, it is disabled. A master code is required within 20 seconds of the line pickup or the line is disconnected.

Location 5 Programming X-10 address for output 1 (two segments, ND)



An X-10 interface module, such as the CS534, must be present for this feature to work properly.

Segment 1 Module number (Default = 0)

Contains the X-10 module number. Program a number from 0 to 15 to represent the corresponding X-10 module number from the following table.

Module #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seg 1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

Segment 2 House code (Default = 0)

Contains the X-10 house code. Program a number from 0 to 15 to represent the corresponding X-10 house code from the following table.

X-10 ADDRESS CODES	0 = A	4 = E	8 = I	12 = M
	1 = B	5 = F	9 = J	13 = N
	2 = C	6 = G	10 = K	14 = O
	3 = D	7 = H	11 = L	15 = P

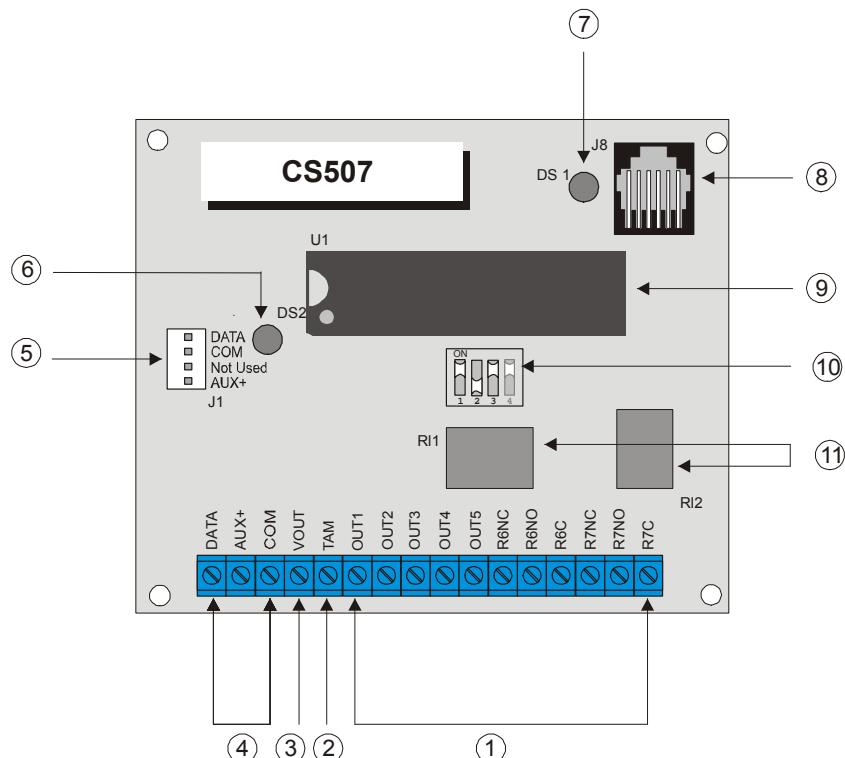
Location 6 to 13 Programming X-10 Address for outputs 2 to 9 (two segments , ND)

These locations are used to program the X-10 address for outputs 2 – 9. Each location has two segments. Segment 1 contains the module number and segment 2 contains the house code. See *Location 5* above for more information.

20 CS507 OUPUT EXPANDER BOARD

The CS507 is an auxiliary module used to expand the capabilities of the CSx75 control panel with the following features:

- A microprocessor controlled 2-relay, five open collector expander.
- Two separate normally open and normally closed relay contacts for a variety of applications, including access control, home control/automation, wireless interfaces and security functions.
- Five low current trigger output (outputs 1, 2, 3, 4, 5).
- Up to eight modules can be connected to the CSx75 control panel.
- It can be programmed to activate for an event in any or all partitions, depending on whether the control panel supports partitions.
- Each relay can be programmed to follow up to eight different schedules to activate the relay during the on time, or to be used in conjunction with another programming option to create time zones.
- An optional tamper switch and auxiliary power terminal making it ideal for use in a remote location.



1 Form C (SPDT) relay connections (2 sets) + five Open Collectors

2 Tamper connection

5 Additional keypad bus connection

6 Supervision LED

9 Processor

10 DIP switches (four positions)

3	Auxiliary power connection	7	X-10 Supervision LED	11	Relay
4	Keypad bus connection	8	X-10 Connection		

20.1 Setting the DIP switches

Decide the starting output of each output expander. The starting output must be on a boundary of eight outputs.

To set the starting output, set the DIP switch according to the table below.



The position of all switches is updated only when the CS507 is powered up. Before you change the position of these switches, you must power down the expander.

Address	DIP Switch 1	DIP Switch 2	DIP Switch 3	Outputs
24	On	On	Off	1-7
25	Off	Off	On	9-15
26	On	Off	On	17-23
27	Off	On	On	25-31
28	On	On	On	33-39
29	Off	Off	Off	41-46
30	On	Off	Off	49-55
31	Off	On	Off	57-63

20.1.1 DIP switch 4

DIP switch 4 is used to disable the tamper feature. (On: is enabled, Off: is disabled.)

20.2 Wiring the CS507

Wire the outputs according to the table below.

20.2.1 Terminal description

Terminal	Description
DATA	Connect to the KP DATA terminal of the CSx75. See the wiring diagram for wire specifications.
AUX	Connect to the KP POS terminal of the CSx75. Current draw is 30 mA.
COM	Connect to the KP COM terminal of the CSx75.

Terminal	Description
Vout	This terminal can supply up to 100 mA fused separate from the power in the control panel. Any power drain from this terminal should be included in total current draw from the CSx75. This allows an isolation of the power between the main control and remote devices. If a short is created past the AUX terminal, those devices cease to function, but the other devices, including the CS507, continue to operate. The CS507 reports this problem to the control panel and it is displayed on the keypad as an expander power trouble.
TAM	Connect as shown below. If not used, connect to a COM terminal.
Out 1- 5	Open collector outputs that switch to GND when activated - capable of up to 100 mA. If the device is connected to outputs, it must see the transition from 13 V to GND. The enclosed resistors must be used. Connect the resistor between AUX and the output being used.
Relay 6 /NC	Normally closed dry contact rated 1 Amp at 30 volts.
Relay 6 /NO	Normally open dry contact rated 1 Amp at 30 volts.
Relay 6 /CO	Normally common dry contact rated 1 Amp at 30 volts.
Relay 7 /NC	Normally closed dry contact rated 1 Amp at 30 volts.
Relay 7 /NO	Normally open dry contact rated 1 Amp at 30 volts.
Relay 7 /CO	Normally common dry contact rated 1 Amp at 30 volts.

An additional connector J1, (left middle), allows a direct bus connection to the controller. An additional cable is supplied with the control panel to allow you to install the expander in the housing of the CSx75. It connects to J16 on the CS575. The expansion board can be connected to the CSx75 controller in two ways:

- When the expansion board is mounted in the box, you can use the direct bus connection as outlined above.
- When the expansion board is mounted remotely, you can use the DATA , AUX+ and COM terminals from the table above. You must wire the tamper of the external box to the COM and TAM terminals.

20.2.2 Specifications

Operating power	12 VDC supplied from CSx75
Auxiliary power	Supplied from CSx75. Current limited to 100 mA.
Current draw	10 mA with no outputs active 25 mA with all outputs active + current draw of any device attached
Operating temperature	0 to 49°C
Dimensions	10 cm wide * 8 cm high * 2.54 cm deep
Shipping weight	115 g

20.3 Programming the CS507

20.3.1 Programming the output configuration and partition

Location 0 Programming the event, zone and time for output 1 (three segments, ND)

This location is used to select the particular function, zone number and time for an output to trip.

Segment 1 (EVENT)	Selects the event that triggers the output. See the table below for the specific events that can be selected.
Segment 2 (ZONE/USER)	Selects the zone or user number necessary to trigger an output. If 0 is programmed in this location, any zone or user activates the output.
Segment 3 (TIME)	Selects the amount of time an output remains activated when an output triggers. If 0 is programmed in this location, the output follows the particular event.

#	Event	#	Event	#	Event
0	<input type="checkbox"/> Burglary Alarm	18	Entry	36	Program Mode
1	<input type="checkbox"/> Fire Alarm	19	Exit	37	Download
2	<input type="checkbox"/> 24-hour Alarm	20	Entry or Exit	38	Ground Fault
3	<input type="checkbox"/> Zone Trouble	21	Armed	39	Over Current
4	<input type="checkbox"/> Zone Tamper	22	Not Armed	40	Box Tamper
5	Burglary Siren	23	Ready	41	Siren Tamper
6	Fire Siren	24	Not Ready	42	Any Zone Faulted
7	Any Siren	25	Fire	43	<input checked="" type="checkbox"/> Any Alarm
8	Zone Bypass	26	Fire Trouble	44	Keypad Beeping
9	AC Failure	27	Chime	45	<input type="checkbox"/> Code Entry
10	System Low Battery	28	<input type="checkbox"/> Expander Trouble	46	Key FOB Function 1
11	<input type="checkbox"/> Duress	29	Dynamic Battery Test	47	<input checked="" type="checkbox"/> Key FOB Function 2
12	<input type="checkbox"/> Manual Fire	30	Open Schedule ♦	48	Auto Arm Control
13	<input type="checkbox"/> Aux 2 Keypad	31	Closed Schedule ♦	49	Auto Disarm Control
14	<input type="checkbox"/> Keypad Panic	32	Listen In	50	Auto Arm and Disarm Control
15	Keypad Tamper	33	Line Seizure	51	Follow schedule of CS507
16	<input type="checkbox"/> Automatic Test	34	Failed to Communicate	52	Flash X-10 for Alarm Memory
17	Alarm Memory	35	Telephone Line Fault	53	Flash X-10 for Siren

♦ See loc. 65 and 66 in CSx75

- ✓ If set to follow condition, these events is 1 second.
- ☒ Events 46 and 47 require RX8i4 - RX16i4 wireless receivers to operate.
- Events 48, 49 and 50 arm or disarm the CSx75 at the open (disarm) or close (arm) time for the appropriate schedule.



For events 48 and 50, the keypad buzzer sounds one minute prior to auto arm if the zone value is 1. If the zone value is 0, the keypad does not sound prior to auto arm.

Location 1 Programming special functions and partitions for output 1 (two segments, FSD)

Segment 1 Selects the following special conditions:

- 1 On: output times in minutes
Off: output times in seconds.
- 2 On: output latches until a code is entered.
- 3 On: output resets if a code is entered while it is being timed.
- 4 On: output only triggers during a closed schedule.
- 5 On: output only triggers during an open schedule.
- 6 On: output is inverted.
- 7 On: a trigger is logged in the event buffer.

Segment 2 Selects the following partitions:

- 1 On: the event activates when it occurs in partition 1.
- 2 On: the event activates when it occurs in partition 2.
- 3 On: the event activates when it occurs in partition 3.
- 4 On: the event activates when it occurs in partition 4.
- 5 On: the event activates when it occurs in partition 5.
- 6 On: the event activates when it occurs in partition 6.
- 7 On: the event activates when it occurs in partition 7.
- 8 On: the event activates when it occurs in partition 8.

Location 2 Enabling the schedules for output 1 (one segment, FSD)

This location is used to enable any or all of the eight schedules. Segment 1 corresponds to schedule 1 and segment 8 corresponds to schedule 8. This location can be used in conjunction with the special function location to create an output that activates only during certain times and/or certain days.

Segment 1	1	On: the event follows schedule 1.
	2	On: the event follows schedule 2.
	3	On: the event follows schedule 3.

- 4** On: the event follows schedule 4.
- 5** On: the event follows schedule 5.
- 6** On: the event follows schedule 6.
- 7** On: the event follows schedule 7.
- 8** On: the event follows schedule 8.

Location 3 Programming the X-10 address for output 1 (two segments, ND)

Segment 1 Program a number from 0 to 15 to represent the corresponding X-10 module number from the following table.

Module #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seg 1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

Segment 2 Program a number from 0 to 15 to represent the corresponding X-10 house code from the following table.

X-10 ADDRESS CODES	0 = A	4 = E	8 = I	12 = M
	1 = B	5 = F	9 = J	13 = N
	2 = C	6 = G	10 = K	14 = O
	3 = D	7 = H	11 = L	15 = P

Locations 4 - 31 Programming for outputs 2 to 7



The information in the following locations is configured in the same way as locations 0, 1, 2 and 3 for output 1. The following table contains the locations for output 1 to 7, output 8 is reserved. Output 8 may be used for X10, but is not a physical output.

Description	Output1	Output2	Output3	Output4	Output5	Output6	Output7
Event	0	4	8	12	16	20	24
Functions	1	5	9	13	17	21	25
Schedules	2	6	10	14	18	22	26
X10 Programming	3	7	11	15	19	23	27

Locations 4 to 31 are used to program the events, zones and times, special functions, partitions, schedules and X-10 addresses for outputs 2 to 7. Each output has four locations which are programmed with the same steps as output 1. See *Location 0*, *Location 1*, *Location 2* and *Location 3* above for more information.

Location 32 Programming the opening time for schedule 1 (two segments, ND)

Segment 1 Program the hour of the opening time in 24-hour format. (1:00 PM = 13)
Segment 2 Program the minutes after the hour of the opening time for schedule 1.

Location 33 Programming the closing time for schedule 1 (two segments, ND)

Segment 1 Program the hour of the closing time in 24-hour format. (1:00 PM = 13)
Segment 2 Program the minutes after the hour of the closing time for schedule 1.

Location 34 Programming the days for schedule 1 (one segment, ND)

Segment 1

- 1** On: the schedule is active on Sunday.
- 2** On: the schedule is active on Monday.
- 3** On: the schedule is active on Tuesday.
- 4** On: the schedule is active on Wednesday.
- 5** On: the schedule is active on Thursday.
- 6** On: the schedule is active on Friday.
- 7** On: the schedule is active on Saturday.
- 8** On: the schedule is disabled on holidays.

Locations 35 to 55 Programming for schedules 2 to 8 (two segments, ND)

These locations are used to program the opening times, closing times and days for schedules 2 to 8. Each schedule has three locations which are programmed with the same steps as schedule 1. See *Location 32* and *Location 33* on page 124 for more information.

Location 56 Programming the date of holidays in January (eight segments, ND)

Program the day of the month in January that the opening time in a schedule is suppressed. For example, if the opening should not occur on January 1, program 1 in segment 1. This feature can be repeated up to a maximum of eight holidays per location (month).

Locations 57 to 67 Programming the date of holidays from February to December (eight segments, ND)

These locations are used to program the day of each month, from February to December, in which the opening time in a schedule is suppressed. Each location accommodates a maximum of eight holidays. See *Location 56* above for more information. See also the *Control panel programming worksheets* on page 130.

Location 68 Authorizing users 1 to 10 for outputs 1 to 7 (10 segments, binary data)

When activating outputs with a user code (event #45), location 68 can be used to restrict certain codes from activating certain outputs. Location 68 contains 10 segments. Segment 1 corresponds to user 1 and segment 10 corresponds to user 10.



The zone/user for the corresponding output must be "0" to use this location.

The last bit of the segment is not used as there are only seven outputs, the eighth bit is reserved.

The number of users depends on the maximum number of control panel users. A maximum of 99 users is available for the CS575 and CS875.

Segment 1-10

- 1** On: the code activates output 1; Off: it does not activate output 1.
- 2** On: the code activates output 2; Off: it does not activate output 2.
- 3** On: the code activates output 3; Off: it does not activate output 3.
- 4** On: the code activates output 4; Off: it does not activate output 4.
- 5** On: the code activates output 5; Off: it does not activate output 5.
- 6** On: the code activates output 6; Off: it does not activate output 6.
- 7** On: the code activates output 7; Off: it does not activate output 7.
- 8** On: the code activates output 8; Off: it does not activate output 8.

Location 69 Authorizing users 11 to 20 for outputs 1 to 7 (10 segments, binary data)

When activating outputs with a user code, this location can be used to restrict certain codes from activating certain outputs. Segment 1 corresponds to user 11 and segment 10 corresponds to user 20. See *Location 68* on page 124 for more information.

Location 70 Authorizing users 21 to 30

When activating outputs with a user code, this location can be used to restrict certain codes from activating certain outputs. Segment 1 corresponds to user 21 and segment 10 corresponds to user 30. See *Location 68* on page 124 for more information.

Location 71 Authorizing users 31 to 40

When activating outputs with a user code, this location can be used to restrict certain codes from activating certain outputs. Segment 1 corresponds to user 31 and segment 10 corresponds to user 40. See *Location 68* on page 124 for more information.

Location 72 Authorizing users 41 to 50

When activating outputs with a user code, this location can be used to restrict certain codes from activating certain outputs. Segment 1 corresponds to user 41 and segment 10 corresponds to user 50. See *Location 68* on page 124 for more information.

Location 73 Authorizing users 51 to 60

When activating outputs with a user code, this location can be used to restrict certain codes from activating certain outputs. Segment 1 corresponds to user 51 and segment 10 corresponds to user 60. See *Location 68* on page 124 for more information.

Location 74 Authorizing users 61 to 70

When activating outputs with a user code, this location can be used to restrict certain codes from activating certain outputs. Segment 1 corresponds to user 61 and segment 10 corresponds to user 70. See *Location 68* on page 124 for more information.

Location 75 Authorizing users 71 to 80

When activating outputs with a user code, this location can be used to restrict certain codes from activating certain outputs. Segment 1 corresponds to user 71 and segment 10 corresponds to user 80. See *Location 68* on page 124 for more information.

Location 76 Authorizing users 81 to 90

When activating outputs with a user code, this location can be used to restrict certain codes from activating certain outputs. Segment 1 corresponds to user 81 and segment 10 corresponds to user 90. See *Location 68* on page 124 for more information.

Location 77 Authorizing users 91 to 99

When activating outputs with a user code, this location can be used to restrict certain codes from activating certain outputs. Segment 1 corresponds to user 91 and segment 9 corresponds to user 99. See *Location 68* on page 124 for more information.

21 CS586 RS232 INTERFACE

The CS586 is a low cost add-on module that fits neatly into any CSx75 system enclosure and provides a standard RS232 bi-directional DB-9 connector for connection to a home automation host system. A simple three-wire connection to the main control is all that is required to fully integrate this card into the system.

The CS586 can be used on a CS175 control panel to provide an RS232 up/download functionality. It is [built into the CS575 and CS875 control panels](#).

The CS586 has several levels of security that can be programmed at the time of installation to allow as much or as little security system information to be passed to the host system. It can also be set to limit the commands that are accepted from the host system to prevent unauthorized attempts to override the security system status.

The unit can be easily configured for communication in an ASCII or binary protocol. A selectable baud rate can be set from 600 baud to 76.8k baud with hardware RTS and CTS handshaking. The ASCII implementation is easy to use and debug with standard programming tools. The binary version is a more efficient method for transferring information between the two systems. The system integrator can select any number of events or conditions to cause the CS586 to send the relevant information to the host without polling. This allows for a faster response to activity than polling alone can provide.

All security system information can be requested anytime if enabled to do so by the installer. This is useful at system initialization and at periodic intervals to keep the two systems in sync without worrying about missing any transitional event. This information is organized as system, partition, zones and outputs. System information contains information such as power status, phone line condition, module troubles and other system wide conditions. Partition information includes readiness of all zones assigned, armed state, entry/exit delays, last user number, alarm condition and many other conditions within a specific partition. Zone information includes faults, alarm memory, bypasses, troubles, tampers, low batteries, missing and partition assignments. Output messages include commands that can be passed to, or from, devices in X-10 compatible format.

21.1 Wiring the CS586

The CS586 is a module which can be plugged in directly to the CS175.

21.1.1 Terminal description

Terminal	Description
POS	Connect to the POSITIVE keypad terminal of CSx75 control panel.
COM	Connect to the COM keypad terminal of the CSx75 control panel.
DATA	Connect to the DATA keypad terminal of the CSx75 control panel.

Terminal	Description			
	DB 9 Pin-out Signal			
Signal Name	CS175 ----- PC	Jumper number	Pin number A position	Pin number B position
CTS*	- >	J7	8**	7

Signal Name	CS175 ----- PC	Jumper number	Pin number A position	Pin number B position
TXS	- >	J8	2	3**
RTS*	<-	J9	8	7**
RXD	<-	J10	2**	3
Sig.Gnd.	< - >	-	5	5
Unused	--	-	1,4,6,9	1,4,6,9

*Rts and Cts signals are not currently supported



**Default jumper settings

21.1.2 Specifications

Operating power	12 VDC supplied from CSx75
Current	30 mA
Operating temperature	0 to 49°C
Dimensions	10 x 8.2 x 2.54 cm (width x length x depth)
Shipping weight	150 g

21.2 General operating instructions

21.2.1 LED Indications

- DS1 Flashes for CSx75 bus.
- DS3 Flashes for each valid packet received from host.
- DS4 Flashes for each packet transmitted to host.
- DS5 On when waiting for CSx75 function to be completed.
- DS6 On when waiting for acknowledgement from host.

21.3 Programming the CS586

21.3.1 Programming the RS232 parameters

All zones are programmed via the CSx75 panel and keypad. See the [CSx75 Installation Manual](#) for information on accessing and programming the CSx75 and changing the characteristics of a configuration group.

Location 0 Programming the option flag (one segment, FSD)

The CS586 protocol can operate in one of two possible modes - binary or ASCII. Consult the home automation application information to determine the proper mode for your application and program it in location 0.

Option 1	LED off = binary	LED on = ASCII
Options 2 - 8	Reserved	

Location 1 Baud rate table (one segment, ND)

See [Location 208](#) on page 82 for more information.

Location 2 Enabling the transitions (two segments, FSD)

The CS586 can be programmed to automatically send information to the home automation system whenever a change is made to this information. This is referred to as transition-based broadcasting. The information packets that use transition-based broadcasting depend on the application and the capabilities of the home automation system. Location 2 is used to enable and disable the appropriate transition based broadcasts. Consult the home automation application information and enable the appropriate transition based broadcasts in location 2.

See [Location 210](#) on page 82 for more information.

Location 3 Programming the command/request enables (four segments, FSD)

The CS586 can perform a variety of commands sent by the home automation system. For example, it can allow the home automation system to arm, disarm and program the security system, or bypass zones. Location 3 selects the commands the home automation system can access. Consult the home automation application information and enable the appropriate commands for your application.

See [Location 211](#) on page 83 for more information.



It is important to understand the capabilities of the home automation system to avoid compromising the security of your system when programming this location.

Location 4 Programming the LCD keypad address (one segment)

In order to activate certain commands, the CS586 must know the location of at least one LCD keypad (if one exists in the system). See [Appendix 3](#) for a list of LCD keypad addresses.

22 CONTROL PANEL PROGRAMMING WORKSHEETS

Factory defaults for segments are in ***bold italics*** and Quick Start location numbers are **highlighted**.

Loc.	Description		Default								Programming																							
0	Country code																																	
1	Phone prefix																																	
2	Phone #1		14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14																															
3	Phone #1, account code		10-10-10-10-10-10																															
4	Phone #1, reporting format		0																															
5	Phone #1, selecting events to report		Seg#1 (Circle numbers to program)								Seg#2 (Circle numbers to program)																							
	1 Alarms								1	Program, Download and Log Full																								
	2 Alarm Restores								2	Tampers																								
	3 Open/Close								3	Short Circuit and Ground Fault																								
	4 Bypass								4	Sensor Lost																								
	5 Zone Trouble								5	Sensor Low Battery																								
	6 Power Trouble (Mains Failure or Low								6	Expander Trouble																								
	7 Battery)								7	Failure To Communicate																								
	8 Siren and Telephone Fault								8	Zone Activity Monitor																								
6	Phone #2								14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14																									
7	Phone #2, account code								10-10-10-10-10-10																									
8	Phone #2, reporting format								0																									
9	Phone #2, selecting events to report		Seg#1 (Circle numbers to program)								Seg# 2																							
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8																		
10	Phone #3								14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14																									
11	Phone #3, account code								10 - 10 - 10 - 10 - 10 - 10																									
12	Phone #3, reporting format								0																									
13	Phone #3, selecting events to report		Seg#1 (Circle numbers to program)								Seg# 2																							
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8																		
14	Phone #4								14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14																									
15	Phone #4, account code								10-10-10-10-10-10																									
16	Phone #4, reporting format								0																									
17	Phone #4, selecting events to report		Seg#1 (Circle numbers to program)								Seg#2																							
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8																		
18	Phone #5								14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14																									
19	Phone #5, account code								10-10-10-10-10-10																									
20	Phone #5, reporting format								0																									
21	Phone #5, selecting events to report		Seg#1 (Circle numbers to program)								Seg#2																							
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8																		
22	Phone #6								14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14-14																									
23	Phone #6, account code								10-10-10-10-10-10																									
24	Phone #6, reporting format								0																									
25	Phone #6, selecting events to report																																	

	Seg#1 (Circle numbers to program)								Seg#2																					
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8														
26	Dial attempts for phone number																													
	Seg#1 ARC reporting								8																					
	Seg#2 Before Fail to Communicate								8																					
	Seg#3 Voice/Pager/Siren Tone Dialing								8																					
27	Report method								0																					
28	Dialer abort delay (0-255 sec)								30																					
29	Listen in time								30																					
30	Download access code								1-2-7-8-0-0-0-0																					
31	Rings to answer download								0																					
32	Download control																													
	Seg#1 (Circle numbers to program)																													
	1	Enables two call answering machine defeat.																												
	2	Reserved																												
	3	Requires call back before downloading.																												
	4	Shutdown control panel.																												
	5	Lock out local programming.																												
	6	Lock out communicator programming.																												
	7	Lock out download section.																												
	8	Enables call back at autotest interval.																												
33	Call back phone number								14-14-14-14-14-14-14-14- 14-14-14-14-14-14-14-14																					
34	Partition #1, feature selection																													
	Seg#1																													
	1	Quick Arm							5	Audible Keypad Panic																				
	2	Re-Exit							6	Auxiliary 1 (1 + 3 double press)																				
	3	Auto Bypass							7	Auxiliary 2 (4 + 6 double press)																				
	4	Silent Keypad Panic (7 + 9 double press)							8	Multi Keypress Tamper																				
	Seg#2																													
	1	LED extinguish enable							5	Enables bypass toggle																				
	2	Require user code for bypassing zones							6	Enables silent auto arm																				
	3	Bypass sounder alert							7	Enables automatic instant																				
	4	Mains power/low battery sounder alert							8	Enables Silent Exit always																				
	Seg#3																													
	1	Open/Close							5	Tamper																				
	2	Bypass							6	Cancel																				
	3	Restore							7	Recent Closing																				
	4	Trouble							8	Exit Error																				
	Seg#4																													
	1	Reserved							5	Reserved																				
	2	On: a wireless zone, which is lost, generates a Tamper alarm during armed state and fault during disarmed state.							6	Reserved																				
	3	On: enables restoral of events as disarming.							7	Reserved																				
	4	On: allow arming with a wireless zone, which is lost.							8	Reserved																				
	Seg# 5 Reserved																													
35	Entry/exit timers																													
	Seg#1 (Entry Time #1)				30																									
	Seg#2 (Exit Time #1)				60																									
	Seg#3 (Entry Time #2)				30																									
	Seg#4 (Exit Time #2)				60																									
	Segments #5 and #6				Reserved																									

36	Zones 1-8, zone types	5-4-1-1-1-1-1-1							
37	Zones 1-8, partition selection (Segment 1=zone 1 to segment 8=zone 8)								
	Segments	Part#1	Part#2	Part#3	Part#4	Part#5	Part#6	Part#7	Part#8
	Seg#1 (1)	1							
	Seg#2 (2)	1							
	Seg#3 (3)	1							
	Seg#4 (4)	1							
	Seg#5 (5)	1							
	Seg#6 (6)	1							
	Seg#7 (7)	1							
	Seg#8 (8)	1							
38	Zones 9-16, zone types	1-1-1-1-1-1-1-1							
39	Zones 9-16, partition selection (Segment 1=zone 9 to segment 8=zone 16)								
	Segments	Part#1	Part#2	Part#3	Part#4	Part#5	Part#6	Part#7	Part#8
	Seg#1 (9)	1							
	Seg#2 (10)	1							
	Seg#3 (11)	1							
	Seg#4 (12)	1							
	Seg#5 (13)	1							
	Seg#6 (14)	1							
	Seg#7 (15)	1							
	Seg#8 (16)	1							
40	Zones 17-24, zone types	1-1-1-1-1-1-1-1							
41	Zones 17-24, partition selection (Segment 1=zone 17 to segment 8=zone 24)								
	Segments	Part#1	Part#2	Part#3	Part#4	Part#5	Part#6	Part#7	Part#8
	Seg# 1 (17)	1							
	Seg#2 (18)	1							
	Seg#3 (19)	1							
	Seg#4 (20)	1							
	Seg# 5 (21)	1							
	Seg#6 (22)	1							
	Seg#7 (23)	1							
	Seg#8 (24)	1							
42	Zones 25-32, zone types	1-1-1-1-1-1-1-1							
43	Zones 25-32, partition selection (Segment 1=zone 25 to segment 8=zone 32)								
	Segments	Part#1	Part#2	Part#3	Part#4	Part#5	Part#6	Part#7	Part#8
	Seg#1 (25)	1							
	Seg#2 (26)	1							
	Seg#3 (27)	1							
	Seg#4 (28)	1							
	Seg#5 (29)	1							
	Seg#6 (30)	1							
	Seg#7 (31)	1							
	Seg#8 (32)	1							
44	Zones 33-40, zone types	1-1-1-1-1-1-1-1							
45	Zones 33-40, partition selection (Segment 1=one 33 to segment 8=zone 40)								
	Segments	Part#1	Part#2	Part#3	Part#4	Part#5	Part#6	Part#7	Part#8
	Seg#1 (33)	1							
	Seg#2 (34)	1							
	Seg#3 (35)	1							

	Seg#4 (36)	1												
	Seg#5 (37)	1												
	Seg#6 (38)	1												
	Seg#7 (39)	1												
	Seg#8 (40)	1												
46	Zones 41-48, zone types	1-1-1-1-1-1-1-1												
47	Zones 41-48, partition selection (Segment 1=zone 41 to segment 8=zone 48)													
	Segments	Part#1	Part#2	Part#3	Part#4	Part#5	Part#6	Part#7	Part#8					
	Seg#1 (41)	1												
	Seg#2 (42)	1												
	Seg#3 (43)	1												
	Seg#4 (44)	1												
	Seg#5 (45)	1												
	Seg#6 (46)	1												
	Seg#7 (47)	1												
	Seg#8 (48)	1												
48	Swinger shutdown count				0									
49	Keypad sounder control													
	Seg#1 (Circle numbers to program)													
	1 Keypad sounds for Telephone Line Cut when in the Armed state.													
	2 Keypad sounds for Telephone Line Cut when in the Disarmed state.													
	3 Keypad sounds upon Mains Power Failure.													
	4 Keypad sounds upon Low Battery Detection.													
	5 Keypad sounds during "B" Alarm trip time.													
	6 Keypad sounds for Tamper Alarm.													
	7 Reserved													
	8 Keypad sounds for expander trouble.													
50	Siren options													
	Seg#1 (Circle numbers to program)													
	1 Siren sounds for Telephone Line Cut while armed.													
	2 Siren sounds for Telephone Line Cut while disarmed.													
	3 Siren blast at arming.													
	4 Siren blast at exit delay expiration.													
	5 Siren blast at closing kissoff.													
	6 Siren sounds for expander trouble.													
	7 Siren sounds for a tamper.													
	8 Siren blasts one time for keyswitch or wireless arming, two times for disarming.													
	Seg#2 (Circle numbers to program)													
	1 Convert siren driver to voltage out.													
	2-8 Reserved													
	Seg#3 Reserved													
51	System options													
	Seg#1 (Circle numbers to program)													
	1 On: delay zone restores until siren timeout.													
	2 On: enable battery presence test (every 10 seconds).													
	3 On: Dynamic Battery test performed at arming.													
	4 On: manual bell test enabled.													
	5 On: manual communicator test enabled.													
	6 On: box tamper input enabled.													
	7 On: clock uses internal crystal.													
	8 On: disable temporal siren on fire.													
	Seg#2 (Circle numbers to program)													

		<p>1 On: disables on-board 8 zones. 2 On: force default configuration for zone types to be used. 3 On: disables bypass reports for force arm. 4 On: enables resetting of tamper memory by a master code. 5 On: enables 2-wire smoke. 6 On: sets 25VA transformer. 7 On: enables Fire to Open / Last to Close. 8 On: enables Summer / Wintertime option.</p>
Seg#3 (Circle numbers to program)		
		<p>1 On: Box Tamper report enabled. 2 On: Mains Fail reporting enabled. 3 On: Low Battery reporting enabled. 4 On: Aux. Power Overcurrent report enabled. 5 On: Siren Supervision report enabled. 6 On: Telephone Line Cut report enabled. 7 Reserved 8 On: Expander Trouble reporting enabled.</p>
Seg#4 (Circle numbers to program)		
		<p>1 Failure To Communicate report enabled. 2 Log Full report enabled. 3 Autotest report enabled. 4 Start and End Programming report enabled. 5 End Download report enabled. 6 Sensor Low Battery report enabled. 7 Sensor Missing report enabled. 8 Reserved</p>
Seg#5 (Circle numbers to program)		
		<p>1 Lost Clock service LED enabled. 2 -8 Reserved.</p>
52	System timers	
	Seg#1 Dynamic Battery Test duration (0-255 minutes)	0
	Seg#2 Mains Failure report delay (0-255 minutes)	5
	Seg#3 Power Up Delay (0-60 seconds)	0
	Seg#4 Internal Siren Time (1-255 minutes)	8
	Seg#5 Telephone Line Cut delay (0-255 seconds)	0
	Seg#6 B-alarm timer	5
	Seg#7 Chime Time in 50 mS increments (0-255)	3
	Seg#8 Fire Alarm Verification Time (120-255 sec.)	0
	Seg#9 Zone Activity Monitor (0-255 Days)	0
	Seg#10 Double Knock Time (0-255 minutes)	0
	Seg#11 Double Knock Open Time (0-255 sec.)	
	Seg#12 External Siren time (1-255 minutes)	
	Seg13 – 14 Reserved	
53	Special features	
	Seg#1 (Circle numbers to program)	
	1	Enables six digit code option. All arm/disarm/Go to program codes require six digits
	2	Requires valid user code entry for *-9-8 and *-9-9 functions to work.
	3	Reserved.
	4	Enable Walk-Test Mode.
	5-8	Reserved.
54	Go to program code	1-2-7-8-0-0
55	Go to program code partition and authorization	
	Seg#1 (Circle numbers to program)	
	1	Reserved
	2	Enables Go to program code as an arm only code.
	3	Enables Go to program code as an arm only after closing.
	4	Enables Go to program code as a master arm/disarm code (can change user codes)
	5	Enables Go to program code as an arm/disarm code.
	6	Enables Go to program code to bypass zones.
	7	Enables Go to program code opening and closing reports.
	8	Reserved

	Seg#2 (Circle numbers to program)				
1	Enables Go to program code for partition #1.				
2	Enables Go to program code for partition #2.				
3	Enables Go to program code for partition #3.				
4	Enables Go to program code for partition #4.				
5	Enables Go to program code for partition #5.				
6	Enables Go to program code for partition #6.				
7	Enables Go to program code for partition #7.				
8	Enables Go to program code for partition #8.				
56	Duress code	15-15-15-15-15			
57	Auxiliary outputs 1-4 partition selection				
	Auxiliary outputs 1-4 special timing	1	2	3	4
	Area 1	1	1	1	1
	Area 2	2	2	2	2
	Area 3	3	3	3	3
	Area 4	4	4	4	4
	Area 5	5	5	5	5
	Area 6	6	6	6	6
	Area 7	7	7	7	7
	Area 8	8	8	8	8
58	Auxiliary outputs 1-4 special timing				
	Segments	1	2	3	4
	Auxiliary output timed in minutes.	1	1	1	1
	Auxiliary output to latch.	2	2	2	2
	Auxiliary output to stop timing upon user code entry.	3	3	3	3
	Auxiliary output to activate only between closing and opening time.	4	4	4	4
	Auxiliary output to activate only between opening and closing time.	5	5	5	5
	Invert auxiliary output (0 volts going to 12 volts when activated).	6	6	6	6
	Reserved	7	7	7	7
	Reserved	8	8	8	8
59	Auxiliary output #1, event and time				
	Seg#1: Event number	0=Burglary alarm			
	Seg#2: Timing	10 seconds			
60	Auxiliary output #2, event and time				
	Seg#1: Event number	1=Fire alarm			
	Seg#2: Timing	10 seconds			
61	Auxiliary output #3, event and time				
	Seg#1: Event number	2=24-hour Alarm			
	Seg#2: Timing .	10 seconds			
62	Auxiliary output #4, event and time				
	Seg#1: Event number	21-Armed State			
	Seg#2: Timing	0=Follow condition			
63	Autotest timing				
	Seg#1: Autotest interval from 1-255 days or hours.				
	Seg#2: Autotest report in 24-hour time formAt.				
	Seg#3: Autotest report time, minutes after the hour.				
	Seg#4: Reserved.				
64	Autotest control				
	Seg#1: Program 1 if the interval is hours, 0 if it is in days. Add2 to suppress the daily test or 3 to suppress the hourly test.				
65	Opening time				
	Seg#1: Hour of the opening time.	8			
	Seg#2: Minutes after the hour of the opening time.	0			
66	Closing time / auto arming time				
	Seg#1: Hour of the closing time / auto arming time.	20			
	Seg#2: Minutes after hour of closing / auto arming time.	0			

67	Days of the week each partition is open								
	Segments	1	2	3	4	5	6	7	8
	Sunday	1							
	Monday	2							
	Tuesday	3							
	Wednesday	4							
	Thursday	5							
	Friday	6							
68	Saturday	7							
	Reserved	8							
68	Days of the week auto arming occurs in partitions 1-8								
	Segments	1	2	3	4	5	6	7	8
	Sunday	1							
	Monday	2							
	Tuesday	3							
	Wednesday	4							
	Thursday	5							
	Friday	6							
	Saturday	7							
	Disable Retry Timer	8							
	Communicator Codes: for three segment locations								
	Seg#1: Report Code 10's digit								
	Seg#2: Report Code 1's digit / 8 channel FFChannel #								
	Seg#3: Voice Channel reported for this event								
	Communicator Codes: for two segment locations								
	Seg#1: Report Code 10's digit								
	Seg#2: Report Code 1's digit / 8 channel FF-Channel #								
69	Open								
70	Close								
71	Partial								
72	Cancel								
73	„B“ Alarm								
74	Zone tamper								
75	Zone tamper restore								
76	Zone trouble								
77	Zone trouble restore								
78	Box tamper								
79	Box tamper restore								
80	Siren tamper								
81	Siren tamper restore								
82	Sensor low battery								
83	Sensor low battery restore								
84	Sensor missing								
85	Sensor missing restore								
86	Duress								
87	Keypad auxiliary 1								
88	Keypad auxiliary 2								
89	Keypad panic								
90	Keypad tamper								
91	Mains fail								
92	Main restore								
93	Low battery								
94	Low battery restore								
95	Overcurrent								
96	Overcurrent restore								
97	Telephone line cut								
98	Telephone line cut restore								
99	Expander trouble								

100	Expander trouble restore			0-0	
101	Fail to communicate			0-0-0	
102	Log full			0-0-0	
103	Autotest			0-0-0	
104	Exit error			0-0-0	
105	Recent close			0-0-0	
106	Start program			0-0-0	
107	End program			0-0-0	
108	End download			0-0-0	
109-	<i>Reserved locations</i>				
121					
122	Partition 1, Account code		10-10-10-10-10-10		
123	Partition 2, Account code		10-10-10-10-10-10		
124	Partition 3, Account code		10-10-10-10-10-10		
125	Partition 4, Account code		10-10-10-10-10-10		
126	Format override				
	Seg#1 (Circle numbers to program)		Seg#2 (Circle numbers to program)		
	1	On: 1800Hz transmit; Off = 1900Hz	1	On: pager formAt	
	2	On: 2300Hz handshake; Off = 1400Hz.	2	On: 1400/2300 handshake	
	3	On: Cksum parity; Off = double round parity	3	On: 8 channel fast format	
	4	On: SIA area modifier	4	On: Voice protocol	
	5	On: Allow Phone # programming.	5	On: ContACt ID	
	6	On: Semadigit.	6	On: SIA	
	7	On: 20 p.p.s.; Off: 10 p.p.s.	7	On: contact ID or 4+3	
	8	On: handshake required.	8	On: DTMF	
	Segments #3 and #4 reserved				
127	SIA code group 1			4	
128	4/2 alarm code group 1				
	Seg#1: Report Code 10's digit			0	
	Seg#2: Report Code 1's digit / 8 channel FF-Channel #			0	
	Seg#3: Voice Channel reported for this event			0	
129	4/2 restore group 1				
	Seg#1: Report Code 10's digit			0	
	Seg#2: Report Code 1's digit / 8 channel FF-Channel #			0	
130	Group 1 characteristic select				
	Seg#1 (Circle numbers to program)				
	1	Fire (enable for fire zone).	5	Delay 1 zone (enable to follow Timer 1 Entry/Exit times).	
	2	24-hour (enable for non-fire 24-hour zone).	6	Delay 2 zone (enable to follow Timer 1 Entry / Exit times).	
	3	Keypad zone.	7	Interior (enable for auto bypass or stay arming).	
	4	Follower (enable for burg zones that are instant during non-entry times).	8	Local Only (enable if zone is not to be reported).	
	Seg#2 (Circle numbers to program)				
	1	Keypad audible on alarm.	5	Bypassable	
	2	Yelping siren on alarm.	6	Group shunt	
	3	Temporal siren on alarm.	7	Force armable	
	4	Chime	8	Entry Guard	
	Seg#3 (Circle numbers to program)				
	1	Fast Loop Response.	5	<i>Dialer Delay zone.</i>	
	2	Double End of Line Tamper zone.	6	<i>Swinger zone.</i>	
	3	<i>Trouble zone (Day zone).</i>	7	<i>Restore reporting.</i>	
	4	Cross zone.	8	<i>Listen-In.</i>	
	Seg#4 (Circle numbers to program)				
	1	Zone Activity Monitor.	5	Double Knock.	
	2	"B" Alarm.	6	Reserved	
	3	Final set door.	7	Reserved	
	4	Roller shutter zone.	8	Reserved	

	Seg#5 – Reserved		
<i>The defaults listed in the characteristic locations below represent the three segments of each location. Use the three segment charts from location 130 to understand these defaults.</i>			
131	SIA code: Group 2		
132	4/2 alarm code		
	Seg#1-2-3:	0-0-0	
133	4/2 restore		
	Seg#1-2:	0-0	
134	Characteristic select		
135	SIA code: Group 3		
136	4/2 alarm code		
	Seg#1-2-3:	0-0-0	
137	4/2 restore		
	Seg#1-2:	0-0	
138	characteristic select		
139	SIA code: Group 4		
140	4/2 alarm code		
	Seg#1-2-3:	0-0-0	
141	4/2 restore		
	Seg#1-2:	0-0	
142	Characteristic select		
143	SIA code: Group 5		
144	4/2 alarm code		
	Seg#1-2-3:	0-0-0	
145	4/2 restore		
	Seg#1-2:	0-0	
146	Characteristic select		
147	SIA code: Group 6		
148	4/2 alarm code		
	Seg#1-2-3:	0-0-0	
149	4/2 restore		
	Seg#1-2:	0-0	
150	Characteristic select		
151	SIA code: Group 7		
152	4/2 alarm code		
	Seg#1-2-3:	0-0-0	
153	4/2 restore		
	Seg#1-2:	0-0	
154	Characteristic select		
155	SIA code: Group 8		
156	4/2 alarm code		
	Seg#1-2-3:	0-0-0	
157	4/2 restore		
	Seg#1-2:	0-0	
158	Characteristic select		
159	SIA code: Group 9		
160	4/2 alarm code		
	Seg#1-2-3:	0-0-0	
161	4/2 Restore		
	Seg#1-2:	0-0	
162	Characteristic select		
163	SIA code: Group 10		
164	4/2 alarm code		
	Seg#1-2-3:	0-0-0	
165	4/2 restore		
	Seg#1-2:	0-0	

166	Characteristic select		
167	SIA code: Group 11		
168	4/2 alarm code		
	Seg#1-2-3:	0-0-0	
169	4/2 restore		
	Seg#1-2:	0-0	
170	Characteristic select		
171	SIA code: Group 12		
172	4/2 alarm code		
	Seg#1-2-3:	0-0-0	
173	4/2 restore		
	Seg#1-2:	0-0	
174	Characteristic select		
175	SIA code: Group 13		
176	4/2 alarm code		
	Seg#1-2-3:	0-0-0	
177	4/2 restore		
	Seg#1-2:	0-0	
178	Characteristic select		
179	SIA code: Group 14		
180	4/2 alarm code		
	Seg#1-2-3:	0-0-0	
181	4/2 restore		
	Seg#1-2:	0-0	
182	Characteristic select		
183	SIA code: Group 15		
184	4/2 alarm code		
	Seg#1-2-3:	0-0-0	
185	4/2 restore		
	Seg#1-2:	0-0	
186	Characteristic select		
187	SIA code: Group 16		
188	4/2 alarm code		
	Seg#1-2-3:	0-0-0	
189	4/2 restore		
	Seg#1-2:	0-0	
190	Characteristic select		
191	SIA code: Group 17		
192	4/2 alarm code		
	Seg#1-2-3:	0-0-0	
193	4/2 restore		
	Seg#1-2:	0-0	
194	Characteristic select		
195	SIA code: Group 18		
196	4/2 alarm code		
	Seg#1-2-3:	0-0-0	
197	4/2 restore		
	Seg#1-2:	0-0	
198	Characteristic select		
199	SIA code: Group 19		
200	4/2 alarm code		
	Seg#1-2-3:	0-0-0	
201	4/2 restore		

	Seg#1-2:	0-0							
202	<i>Characteristic select</i>								
203	<i>SIA Code: Group 20</i>								
204	<i>4/2 alarm code</i>								
	Seg#1-2-3:	0-0-0							
205	<i>4/2 restore</i>								
	Seg#1-2:	0-0							
206	<i>Characteristic select</i>								
207	<i>Serial port enable</i>								
	0 = Serial STU 1 = Home automation protocol enabled (CS586) 2 = Serial printer								
208	<i>Serial port baud rate</i>								
	0= 2400 (2.4K) 1=4800 (4.8K) 2=9600 (9.6K) 3=19200 (19.2K) 4=38400 (38.4K) 5-7=Reserved								
209	<i>Home automation protocol</i>								
	LED off = binary LED on = ASCII								
210	<i>Transition based broadcasts</i>								
	Seg#1	Seg#2							
	1 = Reserved 2 = Interface configuration 3-4 = reserved 5 = zone status 6 = zone snapshot 7 = Partition status 8 = Partitions snapshot message	1 = System status message 2 = X-10 message received 3 = Log event message 4 = Keypad message received 5-8 = Reserved							
211	<i>CS586 Command/request enable</i>								
	Seg#1	Seg#2							
	1 = Reserved 2 = Interface configuration request 3 = Reserved 4 = Zone name request 5 = Zone status request 6 = Zone snapshot request 7 = Partition status request 8 = Partitions snapshot request	1 = System status request 2 = X-10 message message 3 = Log event request 4 = Send keypad text message 5 = Keypad terminal mode req 5-8 = Reserved							
	Seg#3	Seg#4							
	1 = Program data request 2 = Program data command 3 = User info request with PIN 4 = User info request without PIN 5 = Set user code command with PIN 6 = Set user code command w/o PIN 7 = Set user authoriz comm with PIN 8 = Set user authoriz comm w/o PIN	1-2 = reserved 3 = Store communication event command 4 = Set clock/calendar command 5 = Primary keypad function with PIN 6 = Primary keypad function w/o PIN 7 = Secondary keypad function 8 = Zone bypass toggle							
212	<i>LCD keypad address for CS586: See Appendix 3 for more information.</i>								
213	Zones 49-56, zone types	1-1-1-1-1-1-1-1							
214	Zones 49-56, partition selection (Segment 1=zone 49 to segment 8=zone 56)								
	Segments	Part#1	Part#2	Part#3	Part#4	Part#5	Part#6	Part#7	Part#8
	Seg#1 (49)	1							
	Seg#2 (50)	1							

	Seg#3 (51)	1								
	Seg#4 (52)	1								
	Seg#5 (53)	1								
	Seg#6 (54)	1								
	Seg#7 (55)	1								
	Seg#8 (56)	1								
215	Zones 57-64, zone types	1-1-1-1-1-1-1-1								
216	Zones 57-64, partition selection (Segment 1=zone 57 to segment 8=zone 64)	Segments	Part#1	Part#2	Part#3	Part#4	Part#5	Part#6	Part#7	Part#8
	Seg#1 (57)	1								
	Seg#2 (58)	1								
	Seg#3 (59)	1								
	Seg#4 (60)	1								
	Seg#5 (61)	1								
	Seg#6 (62)	1								
	Seg#7 (63)	1								
	Seg#8 (64)	1								
217	Zones 65-72, zone types	1-1-1-1-1-1-1-1								
218	Zones 65-72, partition selection (Segment 1=zone 65 to segment 8=zone 72)	Segments	Part#1	Part#2	Part#3	Part#4	Part#5	Part#6	Part#7	Part#8
	Seg#1 (65)	1								
	Seg#2 (66)	1								
	Seg#3 (67)	1								
	Seg#4 (68)	1								
	Seg#5 (69)	1								
	Seg#6 (70)	1								
	Seg#7 (71)	1								
	Seg#8 (72)	1								
219	Zones 73-80, zone types	1-1-1-1-1-1-1-1								
220	Zones 73-80, partition selection (Segment 1=zone 73 to segment 8=zone 80)	Segments	Part#1	Part#2	Part#3	Part#4	Part#5	Part#6	Part#7	Part#8
	Seg#1 (73)	1								
	Seg#2 (74)	1								
	Seg#3 (75)	1								
	Seg#4 (76)	1								
	Seg#5 (77)	1								
	Seg#6 (78)	1								
	Seg#7 (79)	1								
	Seg#8 (80)	1								
221	Zones 81-88, zone types	5-4-1-1-1-1-1-1								
222	Zones 81-88, partition selection (Segment 1=zone 81 to segment 8=zone 88)	Segments	Part#1	Part#2	Part#3	Part#4	Part#5	Part#6	Part#7	Part#8
	Seg#1 (81)	1								
	Seg#2 (82)	1								
	Seg#3 (83)	1								
	Seg#4 (84)	1								
	Seg#5 (85)	1								
	Seg#6 (86)	1								
	Seg#7 (87)	1								
	Seg#8 (88)	1								
223	Zones 89-96, zone types	1-1-1-1-1-1-1-1								
224	Zones 89-96, partition selection (Segment 1=zone 89 to segment 8=zone 96)									

	Segments	Part#1	Part#2	Part#3	Part#4	Part#5	Part#6	Part#7	Part#8
	Seg#1 (89)	1							
	Seg#2 (90)	1							
	Seg#3 (91)	1							
	Seg#4 (92)	1							
	Seg#5 (93)	1							
	Seg#6 (94)	1							
	Seg#7 (95)	1							
	Seg#8 (96)	1							
225	Partition 5, Account code			10-10-10-10-10-10					
226	Partition 6, Account code			10-10-10-10-10-10					
227	Partition 7, Account code			10-10-10-10-10-10					
228	Partition 8, Account code			10-10-10-10-10-10					
239	Zones 97-104, zone types	1-1-1-1-1-1-1-1							
230	Zones 97-104, partition selection (Segment 1=zone 97 to segment 8=zone 104)								
	Segments	Part#1	Part#2	Part#3	Part#4	Part#5	Part#6	Part#7	Part#8
	Seg#1 (97)	1							
	Seg#2 (98)	1							
	Seg#3 (99)	1							
	Seg#4 (100)	1							
	Seg#5 (101)	1							
	Seg#6 (102)	1							
	Seg#7 (103)	1							
	Seg#8 (104)	1							
231	Zones 105-112, zone types	1-1-1-1-1-1-1-1							
232	Zones 105-112, partition selection (Segment 1=zone 105 to segment 8=zone 112)								
	Segments	Part#1	Part#2	Part#3	Part#4	Part#5	Part#6	Part#7	Part#8
	Seg#1 (105)	1							
	Seg#2 (106)	1							
	Seg#3 (107)	1							
	Seg#4 (108)	1							
	Seg#5 (109)	1							
	Seg#6 (110)	1							
	Seg#7 (111)	1							
	Seg#8 (112)	1							
233	Zones 113-120, zone types	1-1-1-1-1-1-1-1							
234	Zones 113-120, partition selection (Segment 1=zone 113 to segment 8=zone 120)								
	Segments	Part#1	Part#2	Part#3	Part#4	Part#5	Part#6	Part#7	Part#8
	Seg#1 (113)	1							
	Seg#2 (114)	1							
	Seg#3 (115)	1							
	Seg#4 (116)	1							
	Seg#5 (117)	1							
	Seg#6 (118)	1							
	Seg#7 (119)	1							
	Seg#8 (120)	1							
235	Zones 121-128, zone types	1-1-1-1-1-1-1-1							
236	Zones 121-128, partition selection (Segment 1=zone 121 to segment 8=zone 128)								
	Segments	Part#1	Part#2	Part#3	Part#4	Part#5	Part#6	Part#7	Part#8
	Seg#1 (121)	1							
	Seg#2 (122)	1							
	Seg#3 (123)	1							

	Seg#4 (124)	1								
	Seg#5 (125)	1								
	Seg#6 (126)	1								
	Seg#7 (127)	1								
	Seg#8 (128)	1								
237	Zones 129-136, zone types	1-1-1-1-1-1-1-1								
238	Zones 129-136, partition selection (Segment 1=zone 129 to segment 8=zone 136)	Segments	Part#1	Part#2	Part#3	Part#4	Part#5	Part#6	Part#7	Part#8
	Seg#1 (129)	1								
	Seg#2 (130)	1								
	Seg#3 (131)	1								
	Seg#4 (132)	1								
	Seg#5 (133)	1								
	Seg#6 (134)	1								
	Seg#7 (135)	1								
	Seg#8 (136)	1								
239	Zones 137-144, zone types	1-1-1-1-1-1-1-1								
240	Zones 137-144, partition selection (Segment 1=zone 137 to segment 8=zone 144)	Segments	Part#1	Part#2	Part#3	Part#4	Part#5	Part#6	Part#7	Part#8
	Seg#1 (137)	1								
	Seg#2 (138)	1								
	Seg#3 (139)	1								
	Seg#4 (140)	1								
	Seg#5 (141)	1								
	Seg#6 (142)	1								
	Seg#7 (143)	1								
	Seg#8 (144)	1								
241	Zones 145-152, zone types	1-1-1-1-1-1-1-1								
242	Zones 145-152, partition selection (Segment 1=zone 145 to segment 8=zone 152)	Segments	Part#1	Part#2	Part#3	Part#4	Part#5	Part#6	Part#7	Part#8
	Seg#1 (145)	1								
	Seg#2 (146)	1								
	Seg#3 (147)	1								
	Seg#4 (148)	1								
	Seg#5 (149)	1								
	Seg#6 (150)	1								
	Seg#7 (151)	1								
	Seg#8 (152)	1								
243	Zones 153-160, zone types	1-1-1-1-1-1-1-1								
244	Zones 153-160, partition selection (Segment 1=zone 145 to segment 8=zone 152)	Segments	Part#1	Part#2	Part#3	Part#4	Part#5	Part#6	Part#7	Part#8
	Seg#1 (145)	1								
	Seg#2 (146)	1								
	Seg#3 (147)	1								
	Seg#4 (148)	1								
	Seg#5 (149)	1								
	Seg#6 (150)	1								
	Seg#7 (151)	1								
	Seg#8 (152)	1								
245	Zones 161-168, zone types	1-1-1-1-1-1-1-1								
246	Zones 161-168, partition selection (Segment 1=zone 161 to segment 8=zone 168)									

Segments	Part#1	Part#2	Part#3	Part#4	Part#5	Part#6	Part#7	Part#8
Seg#1 (161)	1							
Seg#2 (162)	1							
Seg#3 (163)	1							
Seg#4 (164)	1							
Seg#5 (165)	1							
Seg#6 (166)	1							
Seg#7 (167)	1							
Seg#8 (168)	1							

23 APPENDIX 1: REPORTING FIXED CODES IN CONTACT ID AND SIA

This table lists the event codes sent for the following reports (if enabled) when using Contact ID or SIA formats.

Report	Contact ID	SIA	Report	Contact ID	SIA
Manual test	601	RX	Low battery restore (device number)	309	YR
Autotest	602	RP	Mains fail (device number)	301	AT
Open(user number)	401	OP	Mains restore (device number)	301	AR
Close (user number)	401	CL	Box tamper (device number)	137	TA
Cancel (user number)	406	OC	Box tamper restore (device number)	137	TR
Download complete	412	RS	Keypad tamper	137	TA
Start program	627	LB	Keypad panic(audible)	120	PA
End program	628	LX	Keypad panic (silent)	121	HA
Recent close (user number)	401	CR	Duress	121	HA
Exit error (user number)	457	EE	Keypad auxiliary 1	110	FA
Event log full	605	JL	Keypad auxiliary 2	100	MA
Fail to communicate	354	RT	RF sensor lost (zone number)	381	*T
Expander trouble (device number)	333	ET	RF sensor restore (zone number)	381	*R
Expander restore (device number)	333	ER	Sensor low battery (zone number)	384	XT
Telephone fault	351	LT	Sensor battery restore (zone number)	384	XR
Telephone restore	351	LR	Zone trouble (zone number)	380	*T
Siren tamper (device number)	321	YA	Zone trouble restore (zone number)	380	*R
Siren restore (device number)	321	YH	Zone tamper (zone number)	137	TA
Aux power over current (device number)	312	YP	Zone tamper restore (zone number)	137	TR
Aux power restore (device number)	312	YQ			
Low battery(device number)	309	YT			

Report	Contact ID	SIA	Report	Contact ID	SIA
Zone bypass (zone number)	570	*B	Zone activity restore	391	NS
Bypass restore (zone number)	570	*U	Fail to close	454	CI
Near Alarm (A/B Alarm)	138	BM	RF jamming	344	XQ
Early open/late close	451	OK	RF jamming restore	344	XH
Partial close	456	CF	Smoke detector clean me	393	YX
Zone activity fault	391	NA	Smoke detector clean me restore	393	YZ

The number in parentheses following the event is the number that is reported as the zone number. If there are no parentheses, the zone is 0. See Appendix 2 for a list of device numbers.



** The character transmitted in this slot is the first character from the event code of the zone that is bypassed or in trouble. See Location 127 to Location 206, starting on page 80, for more information.*

24 APPENDIX 2: REPORTING ZONE CODES IN CONTACT ID AND SIA

The CSx75 can report SIA level 1 transmissions to either one or both phone numbers. Each report in SIA consists of an event code and a zone or user ID. The zone ID is the zone number that is in alarm. The event code comes from the table below and is programmed in the zone type event code.

The CSx75 has the ability to report Ademco Contact ID transmissions. Each report in Contact ID consists of an event code and a zone ID. The zone ID is the zone that created the alarm. The event code comes from the table below and is programmed in the zone type event code.

SIA			Contact ID	
Programmed Event Code	SIA Code	Description	Contact ID Code	Description
0	HA	Holdup Alarm	122	Silent Panic
1	FA	Fire Alarm	110	Fire Alarm
2	PA	Panic alarm	120	Panic alarm
3	BA	Burglary Alarm	130	Burglary Alarm
4	BA	Burglary Alarm	131	Perimeter Alarm
5	BA	Burglary Alarm	132	Interior Alarm
6	UA	Untyped Alarm	133	24-hour Burglary
7	BA	Burglary Alarm	134	Entry Alarm
8	BA	Burglary Alarm	135	Day/Night Alarm
9	UA	Untyped Alarm	150	Non Burglary 24-hour
10	HA	Holdup Alarm	121	Duress Alarm
11	MA	Medical Alarm	100	Medical Alarm
12	PA	Panic alarm	123	Audible Panic Alarm
13	TA	Tamper Alarm	137	Tamper Alarm
14	RP	Periodic Test	602	Periodic Test
15	GA	Gas Alarm	151	Gas Detected
16	KA	Heat Alarm	158	High Temp
17	WA	Water Alarm	154	Water Leakage
18	QA	Emergency Alarm	140	General Alarm
19	SA	Reserved	140	General Alarm

SIA			Contact ID	
20	ZA	Freeze Alarm	159	Low Temp

25 APPENDIX 3: OVERVIEW OF MODULE NUMBERS

Every keypad, expansion module and wireless receiver module has a module number. The following tables list the different module numbers.

Device	Device # reported
Control panel	0
CS534 Two-way Listen-In	64

25.1 Keypads

Keypad	Part1	Part2	Part3	Part4	Part5	Part6	Part7	Part8
1	192	193	194	195	196	197	198	199
2	200	201	202	203	204	205	206	207
3	208	209	210	211	212	213	214	215
4	216	217	218	219	220	221	222	223
5	224	225	226	227	228	229	230	231
6	232	233	234	235	236	237	238	239
7	240	241	242	243	244	245	246	247
8	248	249	250	251	252	253	254	255

25.2 Hardware expander CS216

Starting zone number	Expander # reported	Starting zone number	Expander # reported
Zone 41 (Switch 1 & 3 on)	19	Zone 105 (Switch 1, 3 & 4 on)	101
Zone 49 (Switch 2 & 3 on)	20	Zone 113 (Switch 2, 3 & 4 on)	102
Zone 57 (Switch 1, 2 & 3 on)	21	Zone 121 (Switch 1, 2, 3 & 4 on)	103
Zone 65 (Switch 4 on)	96	Zone 129 (Switch 5 on)	104
Zone 73 (Switch 1 & 4 on)	97	Zone 137 (Switch 1 & 5 on)	105
Zone 81 (Switch 2 & 4 on)	98	Zone 145 (Switch 2 & 5 on)	106
Zone 89 (Switch 1, 2 & 4 on)	99	Zone 153 (Switch 1, 2 & 5 on)	107
Zone 97 (Switch 3 & 4 on)	100	Zone 161 (Switch 3 & 5 on)	108

25.3 Output module CS507

Address & DIP switch setting	
24 (Switch 1 & 2 on)	28 (Switch 1, 2 & 3 on)
25 (Switch 3 on)	29 (All switches off)
26 (Switch 1 & 3 on)	30 (Switch 1 on)
27 (Switch 2 & 3 on)	31 (Switch 2 on)

25.4 Wireless receiver (RX8w8 and RX16w8)

Switch Setting	Expander # reported
All switches off	35
Switch 1 on	36
Switch 2 on	37
Switches 1 & 2 on	38
Switch 3 on	39
Switches 1 & 3 on	32
Switches 2 & 3 on	33
Switch 1, 2 & 3 on	34

25.5 Wireless receiver (RX8I4)

Switch Setting	Expander # reported
All switches off	35
Switch 1 on	36
Switch 2 on	37
Switches 1 & 2 on	38
Switch 3 on	39
Switches 1 & 3 on	32
Switches 2 & 3 on	33
Switch 1, 2 & 3 on	34

26 APPENDIX 4: SERVICE MESSAGES

Message	Explanation
Control Over-current	A short circuit of a control panel's power supply has occurred.
Control Siren Trouble	Open circuit has occurred on the bell or siren circuit.
Control Box Tamper	(Optional) The box tamper circuit has activated.
Control Phone Trouble	A phone line connected to the control is not operating properly.
Control Fail to comm.	The control tried to send a message to the central station, but failed.
Control Ground Fault	A short to ground has been detected on a control circuit.
Control Loss of Time	The system has lost total power and needs the clock reset.
Control Power Trouble	The mains power to the system is not on.
Control Low Battery	The standby battery is low.
Expansion Over-current	A short circuit of an expansion device's power supply has occurred.
Expansion Aux. Comm. Fail	An auxiliary reporting device has failed to communicate.
Expansion Power Trouble	The mains power to an expansion power supply is not on.
Expansion Low Battery	An expansion power supply has a low battery
Expansion Box Tamper	A box containing an expansion device has been opened.
Expansion Trouble	An expansion device or keypad is not reporting to the control panel.
Expansion Siren Trouble	Open circuit has occurred on the bell or siren circuit of the expander.
Zone Tamper, Press *	A zone is tampered. Press * to identify the tampered zone.
Zone Low Batt, Press *	A wireless device has a low battery. Press * to identify the zone.
Zone Lost, Press *	A wireless zone device is not reporting to the control. Press * to identify the zone.
Zone Trouble, Press *	A zone has some form of trouble (probably wiring). Press * to identify the zone.

27 GLOSSARY

24-hour zone	This zone remains armed the whole time unless inhibited by forced arming. It reports as a normal burglary zone when armed.
“A” and “B” Alarm Reporting	If a zone is defined as an A zone, an alarm is reported if a zone is activated. If a zone is defined as a B zone, a second activation must take place within a pre-set time. Fire and medical and personal attack zones are always treated as A zones.
	See <i>Location 52</i> on page 71 and <i>Location 127</i> to <i>Location 206</i> , starting on page 80, for more information.
Abort	If enabled, the CSx75 waits the number of seconds programmed in location 52 prior to sending an alarm. To cancel the report, type in a code. Dialer Delay must be enabled in the Characteristic Select of locations 127 - 206.
	See <i>Location 52</i> on page 71 and <i>Location 127</i> to <i>Location 206</i> , starting on page 80, for more information.
Mains Fail / Low Battery Report/Warning	The CSx75 can be programmed to report mains failure and/or low battery conditions to the central station. It can also be programmed to sound the keypad immediately upon detection of the condition. The mains failure report/warning can be delayed.
	See <i>Location 51</i> on page 70 and <i>Location 52</i> on page 71 for more information.
Mains Power / Low Battery Sounder Alert-	If enabled, the CSx75 beeps the keypad sounder upon arming or disarming if the mains power is missing or a low battery has been detected.
	See <i>Location 34</i> on page 65 for more information)
Access zone	This is similar to a burglary zone except that activations on these zones are ignored during entry and exit times.
Account code	The code by which the ARC/central station identifies and charges the user.
ARC (alarm report centre)	This is the place contacted via telephone when an alarm takes place. It is also known as a control station or a central station.
Arm / Disarm Codes	The CSx75 can have four-digit codes or six-digit codes to arm/disarm the control. All codes must have the same number of digits. The factory default for User #1 is 1122 when using a four-digit code, or 112256 for a six-digit code. This code can then be used to enter the new arm/disarm codes.
	See <i>Location 53</i> on page 71 for more information.
Armed	The security system is on.
Autotest	This feature causes the panel to call the central station to report a communicator test at a specified interval.
	See <i>Location 63</i> and <i>Location 64</i> on page 75 for more information.

Automatic arming	If programmed, the CSx75 auto arms at a specified time. At this time, the keypad beeps for 50 seconds before the panel arms. The arming process is stopped if a code is entered on the keypad. The CSx75 then attempts to arm after every 45 minutes of inactivity until the next opening time (location 52), or until the system is armed. The 45-minute timer is extended when there is activity in the building causing the Ready LED to turn off and on. If closing reports are sent, the user code is 97.
	See <i>Location 34</i> on page 65 and <i>Location 52 to Location 55</i> , starting on page 71, for more information.
Automatic bypass	If enabled, the control panel can automatically bypass interior follower zones if an exit is not detected during the exit delay time. Entry delay zones can also be made instant.
	See <i>Location 34</i> on page 65 for more information.
Auxiliary outputs	The CSx75 has four programmable outputs that can be used to activate relays, LEDs, etc.
	See <i>Location 57 to Location 62</i> , starting on page 73, for more information.
Auxiliary power overcurrent	This indicates that too much current is drawn from any device powered by the system. This condition can be reported to the central station.
	See <i>Location 51</i> on page 70 for more information.
Binary coded decimal	A method of calculating and displaying numbers.
Box tamper	The CSx75 has an input for a normally closed tamper switch. The box tamper can be programmed to report and/or sound the siren and/or the keypad. These terminals can be enabled or disabled in programming.
	See <i>Location 49 to Location 51</i> , starting on page 69, for more information.
Built-in siren driver	The CSx75 has a built-in 112db siren driver. When desired, this built-in driver can be easily converted to a 1-amp voltage output through programming. The siren can be 15 or 30 Watt maximum, with an impedance of 4, 8 or 16 ohms.
	See <i>Location 50</i> on page 69 for more information.
Burglary zone type	This is armed when the system is armed. A forced arm can exclude it.
Buzzer	A local low volume vibrating audio output located in the keypad.
Bypass toggle	This feature lets the end user turn on and off the bypass of an interior zone with the system armed by pressing the Bypass key.
	See <i>Location 34</i> on page 65 for more information.
Bypassed zones	Zones that are left open when the rest of the system is armed. They can be entered without triggering an alarm.
Call back	If enabled, the control uses the call back phone number to call the download computer before beginning a download.
	See <i>Location 32</i> on page 64 for more information.

Cancel	If enabled, the CSx75 sends a cancel report if when the system is disarmed. Dialler Delay must be enabled in the Characteristic Select in locations 127 to 206.
	See <i>Location 34</i> on page 65 for more information.
Chime	An audible signal that a door has been opened.
Code	A series of four to six numbers that allow access to the system.
Code Required Options	The CSx75 can be programmed to require a code for bypassing zones and/or initiating a download using the *-9-8 or *-9-9 function.
	See <i>Location 34</i> on page 65 and <i>Location 53</i> on page 71 for more information.
Communication formats	The CSx75 can report in multiple formats. It is recommended that you use Contact ID or SIA formats if possible. If you wish to report to a pager or in a 4+2 format to a central station, you must program each code to be reported.
	See <i>Location 69</i> to <i>Location 121</i> , starting on page 77, and <i>Location 127</i> to <i>Location 206</i> , starting on page 80, for more information.
Configuration	The arrangement of the hardware and software of the security system set up for a particular installation.
Delayed restore	The CSx75 can be programmed to send alarm and restore reports as soon as they occur, or wait until the siren time has expired.
	See <i>Location 51</i> on page 70 for more information.
Disarmed	The security system is off.
Display	The window on the keypad.
Double knock	A zone which generates an alarm only when it is opened twice within a programmed time frame.
Double open	The length of time the double knock zone remains open after the first event. If a second event is generated within the set time, an alarm is generated.
Duress code	If a duress code is programmed, the CSx75 sends a duress signal whenever the panel is armed or disarmed with this code. If open/close reports are sent, the user code is 254.
	See <i>Location 56</i> on page 72 for more information.
Dynamic battery test	The CSx75 can be programmed to perform a dynamic battery test for a selected duration the first time the panel is armed or disarmed every day, as well as by pressing *40 Test Function. If the panel is not armed or disarmed during the day, it performs the test at midnight. The CSx75 can also be programmed to perform a missing battery test every 12 seconds.
	See <i>Location 51</i> on page 70 and <i>Location 52</i> on page 71 for more information.
EN50131	European security standard. It involves a set of rules which limits the amount of access the installer has to a user's security system.
Entry route	The route taken to enter and reach the control unit to disarm the system.
Entry time	Time within which the user must disarm the system before a full alarm occurs.

Entry-guard	A unique low level arming mode that reduces the most common source of false alarms. When armed, the opening of any zones designated as entry-guard zone activates the keypad sounder and starts the entry delay before creating an alarm. All other zones function as normal. This arming mode encourages system owners to use their system more frequently when the premises are occupied.
	See <i>Location 127 to Location 206</i> , starting on page 80, for more information.
Event log	A list of events that have occurred in the security system. They are held in a sequential event buffer with a time and date stamp. Up to 100 events are kept in the rolling log. The log is never full, but overwrites the oldest entries with new data.
Exit error	If enabled, the CSx75 sends an exit error report if an entry/exit zone is faulted at the instant the exit delay expires. This report is sent along with the user number that armed the system, if the panel is not disarmed before the entry delay expires. Even if this feature is not enabled, the siren sounds if any entry/exit zone is faulted at the instant the exit delay expires.
	See <i>Location 34</i> on page 65 for more information.
Exit route	The route taken to leave the secured area after arming.
Exit terminator	This allows the user to program the control unit to arm as soon as it detects that the door used to exit the premises has closed.
Exit time	Time allowed when exiting the building after turning on the security system before an alarm is reported.
Expander trouble	The CSx75 reports expander trouble to the central station if enabled. The keypads are considered expanders.
	See <i>Location 49 to Location 51</i> , starting on page 69, for more information.
Fail to Communicate	The system has failed to communicate with the central station. If enabled, a Fail to Communicate code is reported when the next report is successfully communicated.
	See <i>Location 51</i> on page 70 for more information.
Final door set	This allows the user to program the control unit to arm as soon as it detects that the door used to exit the premises has closed.
Fire alarm verification	When enabled, the CSx75 verifies a fire alarm by requiring more than one trip on a smoke detector within a specified time before creating an alarm.
	See <i>Location 52</i> on page 71 for more information.
First to open/Last to close	In a multipartitioned system, the first area opened is reported to the central station and a log is kept recording when the other areas are opened. When closing the areas, a log is kept of all the areas as they are closed and only when the last open area is closed and a report is sent to the central station. In a single partitioned system, a report is sent when the system is opened and closed.
	See <i>Location 34, Segment 3</i> on page 65 for more information. Use location 51 with multi-area system with only one account.

Force arming	Arms the security system when a number of zones are open without inhibiting each one individually. When enabled, the CSx75 can be force armed with zones violated. Under this condition, if a force armable zone is not secure, the Ready LED flashes. At the end of the exit delay, these zones are bypassed. If these zones are secured any time during the arming cycle, they are unbypassed and active in the system. If Bypass Report is enabled, the force arming zones can be programmed to report bypass when they are force armed (default), or to not report bypass even if Bypass Report is enabled.
	See <i>Location 51</i> on page 70 and <i>Location 127</i> to <i>Location 206</i> , starting on page 80, for more information.)
Group bypass	A designated group of zones can be programmed to bypass by pressing Bypass-0-Bypass-Bypass prior to arming.
	See <i>Location 127</i> to <i>Location 206</i> , starting on page 80, for more information.
Inhibited zones	Zones that are left open when the rest of the system is armed. They can be entered without triggering an alarm.
Internal event Log	A list of events that have occurred in the security system. They are held in a sequential event buffer with a time and date stamp. Up to 256 events are kept in the rolling log. The log is never full, but overwrites the oldest entries with new data. These events can later be viewed through downloading. All reportable events report to the log.
Keypad activated panics	The CSx75 has three keypad activated panics that send reports to the central station: Auxiliary 1, Auxiliary 2 and Keypad Panic. Auxiliary 1 activates the steady siren, Auxiliary 2 sounds the keypad and Keypad Panic can be programmed to be silent or audible (sound siren).
	See <i>Location 34</i> on page 65 for more information.
Keypad sounder control	The CSx75 can be programmed to sound the keypad sounder for certain events.
	See <i>Location 49</i> on page 69 for more information.
Keypad tamper	If enabled, the CSx75 disables the keypad for 60 seconds and sends a tamper signal to the central station if 30 keypresses are entered without producing a valid code.
	See <i>Location 34</i> on page 65 for more information.
Keyswitch	A mechanical device that can turn the system on or off without a code.
	The keyswitch is normally placed outside the protected premises to effect arming and disarming. A keyswitch must be a single pole (two-state) switch, which is connected to a zone. It can be pulsed or normally closed.
Keyswitch arm/disarm	Any zone on the CSx75 can be programmed as a keyswitch zone. If this is done, a momentary short on this zone arms/disarms the control. If opening/closing reports are sent, the user code is 99.
	See <i>Location 36</i> on page 67 for more information.
Keyswitch zone type	A keyswitch zone is used to arm and disarm the control unit.
	Keyswitch activation immediately arms the control unit if the control unit is disarmed. No exit time is allowed.

LED extinguish	This feature extinguishes all LEDs on the keypad, except the Power LED, after 60 seconds without a keypress. Pressing any numeric key lights all LEDs.
	See <i>Location 34</i> on page 65 for more information.
LED Lockout	This feature causes the LED Extinguish feature to require a code to illuminate the LEDs.
	See <i>Location 32</i> on page 64 for more information.
Local programming lockout	This feature disables programming of all locations or specified locations from the keypad.
	See <i>Location 32</i> on page 64 for more information.
Manual test	The CSx75 can be programmed to perform a bell and/or communicator test when *4 is pressed while the system is in the disarmed state.
	See <i>Location 51</i> on page 70 for more information.
On-board zone disable	The eight zones on the CSx75 panel can be disabled in order to have a completely wireless alarm system.
	See <i>Location 51</i> on page 70 for more information.
Open zone	A zone that is not secure such as a protected door or window which has been left open.
Partitions	The CSx75 can be partitioned into a maximum of eight separate systems with distinct reporting codes, user codes and operating features for each system.
	See <i>Location 36</i> to <i>Location 43</i> , starting on page 67, for more information.
Program code	The factory default for the Go to program code is 1278 when using a four-digit code or, if the six-digit location is used, the default is 127800. The Go to program code can also be used as an arm/disarm code. If used as an arm/disarm code and open/close reports are sent, the user code is 255.
	See <i>Location 55</i> on page 72 for more information.
Quick arm feature	The CSx75 has a one button quick arm feature which can be used to arm the system by pressing the Exit key or the Stay key on the keypad. If closing reports are sent, the user code is 98.
	See <i>Location 34</i> on page 65 for more information.
Recent closing	If enabled, the CSx75 sends a recent closing report to the central station if an alarm occurs within five minutes after the panel is armed. The user number that armed the system is also sent.
	See <i>Location 34</i> on page 65 for more information.
Re-exit	The CSx75 has the ability to restart the exit delay for a quick exit without disarming the system by pressing the Exit key while the system is armed.
	See <i>Location 34</i> on page 65 for more information.
Shutdown	This mode causes the keypads to turn off all LEDs (except the Power LED) and not accept keypresses.
	See <i>Location 32</i> on page 64 for more information.

Silent exit option	The exit delay can be silenced by pressing *-Exit before arming the control panel or when using the re-exit feature. The exit delay can also be silenced permanently in all partitions.
	See <i>Location 51</i> on page 70 for more information.
Siren blast for arming	The CSx75 can be programmed to give a one-second siren blast when the panel is armed, at the end of the exit delay or when the central station receiver acknowledges the closing report. It can also give one blast for remote (keyswitch) arming and two blasts for remote disarming.
	See <i>Location 50</i> on page 69 for more information.
Siren supervision	The CSx75 has a siren supervision circuit that constantly monitors the siren on the CSx75 and can be programmed to report if the wires are cut.
	See <i>Location 51</i> on page 70 for more information.
Split / multiple reports	The CSx75 can send communication reports to six different phone numbers for split or multiple reports selectable by event.
	See <i>Locations 5, 9, 13, 17, 21 and 25</i> , starting on page 62, for more information.
Start/end programming and end downloading	A report can be sent when local programming is started and ended. A report can also be sent when a download session ends.
	See <i>Location 51</i> on page 70 for more information.
Swinger shutdown	This feature allows a zone or zones to be automatically bypassed after a specified number of alarms. If Delay Zone Restore is not enabled in location 51, the alarms (and restores, if enabled) are sent as they occur. If Delay Zone Restore is enabled, a second or subsequent alarm is not sent until the siren times out.
	See <i>Location 48</i> on page 68 for more information.
Tamper	If the security system is interfered with, a tamper is recorded. Generally the system has to be reset by the installer.
Telephone line monitor	The CSx75 has a telephone line monitor that monitors the voltage and current of the telephone line for a detection of a faulted phone line.
	See <i>Location 49</i> on page 69 and <i>Location 51</i> on page 70 for more information.
Temporal siren disable	If disabled, the fire siren is steady and Fire Voltage Out is the same as Burglary (continuous). Otherwise, the fire siren is temporal.
	See <i>Location 51</i> on page 70 for more information.
Tone sniff answering machine defeat	If enabled, only one call is required to defeat the answering machine. From the computer, call the panel as normal. When the answering machine answers, the panel hears the tones from the modem and seizes the phone line for a download.
	See <i>Location 32</i> on page 64 for more information.

Two-call answering machine defeat	If enabled, two telephone calls must be made to the premises to defeat an answering machine. On the first call, let the phone ring one or two times. The control panel detects these rings and starts a 45-second timer, during which the control panel answers the next call on the first ring. This is not recommended for commercial applications.
	See <i>Location 32</i> on page 64 for more information.
Walktest mode	This is used to verify that all zone inputs operate correctly. Each zone is triggered and the internal sounder rings.
	All activations and restorations of zone inputs during a walktest are logged.
	If enabled, entering *Chime followed by a user code allows a walk-through zone test where all zones become silent and local (non-reporting). The number of the faulted zone(s) is displayed on the LCD keypad. It is also entered into alarm memory and the internal log. To exit at any time during this mode, enter a user code. Otherwise the walktest mode automatically exits after 15 minutes.
	See <i>Location 53</i> on page 71 for more information.
Wireless sensor missing/Low battery	The CSx75 sends a report to the central station when a wireless sensor has detected a low battery or has not reported to the receiver.
	See <i>Location 51</i> on page 70 for more information.
Zone	An area guarded by a group of one or more detection devices.
Zone activity monitor	This feature sends a report to the central station when a particular zone does not change conditions within the specified number of days programmed.
	See <i>Location 52</i> on page 71 and <i>Location 127</i> to <i>Location 206</i> , starting on page 80, for more information.
Zone bypassed sounder alert-	If this feature is enabled, the CSx75 beeps the keypad sounder upon arming if a zone is bypassed.
	See <i>Location 34</i> on page 65 for more information.
Zone types (Configurations)	The CSx75 has 20 programmable zone types that determine how each zone functions and reports.
	See <i>Location 36</i> on page 67 for more information.

28 TECHNICAL SPECIFICATIONS

Operating power Input	230 VAC \pm 10% - 50 Hz \pm 10%		
Fuse 230 V	F315 mA, 20x5		
Operating power output	16.5 VAC 25, 40, or 50 VA Transformer		
Auxiliary power with 25 VA	13.8 VDC \pm 5% Regulated, 0.5A max.		
Auxiliary power with 40/50 VA	13.8 VDC \pm 5% Regulated, 1A max.		
Recommended battery	12 V, 10 Ah max.		
Power consumption	91 mA		
Loop resistance	Standard Loop	4K7 ohm, 2 %, 0.25 W	
	2-wire Smokes	560 ohm, 2 %, 0.25 W maximum	
Built-in siren driver	2-tone (Temporal and Yelp)		
Loop response	Selectable 50 msec or 500 msec		
Operating temperature	0 to 49°C / Relative humidity max. 93%		
Shipping weight	4.5 kg		

CSx75 and Expander current draw data with EOL on the panel

Board	12.5 VDC	Standby	In Alarm
CSx75	60 mA		
CSx75 w/ Dialer	105 mA		
CS535	35 mA		
CS534	72 mA		
CS507	68 mA		
CS216	64 mA		
CS LCD (piezo off)	92 mA	12 mA	62 mA
CS LCD (piezo on)	103 mA		
CS LED (piezo off)	78 mA	7 mA	36 mA
CS LED (piezo on)	90 mA		

28.1 Keyswitch zones

		Static	Impulse
Single loop	4k7:	Disarmed	Quiet
	Short	Armed	Change status
	Open:	No reaction	No reaction
Dual loop	9k4	Disarmed	Quiet
	4k7	Armed	Change status
	Short or totally open	Tamper	Tamper

29 TASKS SUMMARY

Command	Task	Master User Code: 1122	User Code	Installer Code: 1278
*0	Set tone	No code required	No code required	No code required
*1	Master mode	X	X	-
*2	Service check	No code required	No code required	No code required
*3	Alarm memory	No code required	No code required	No code required
*40	Test	No code required	No code required	No code required
*41	Telephone #1	X (See Note 2)	-	-
*42	Telephone #2	X (See Note 2)	-	-
*43	Telephone #3	X (See Note 2)	-	-
*44	Telephone #4	X (See Note 2)	-	-
*45	Telephone #5	X (See Note 2)	-	-
*46	Telephone #6	X (See Note 2)	-	-
*47	Light control	No code required	No code required	No code required
*48	Light configuration	-	-	X
*49	Change language	No code required	No code required	No code required
*5	Change user code	X	X (see Note 1)	-
*6	Assign authority level	X	-	-
*7	Detector reset	No code required	No code required	No code required
*8	Enter programming mode	-	-	X
Press twice 	Leave programming mode	-	-	-
*90	Event log	X	-	X
*91	Assign view/brightness LCD	X	-	-
*92	Program custom messages	-	-	X
*93	Set keypad options	-	-	X
*94	Set keypad number and partition	-	-	X
*95	Set time since last auto test	-	-	X
*96	Set system date and time	X	-	-
*97	Set system date and time	X	-	-
*98	Call back for download	X	X	-
*99	Seize phone line for download	X	X	-



1 *Users can only change their own codes.*

2 *This can only be changed for Special build-your own protocol. See location 126 on page 79 for more information.*

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